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ABSTRACT

START was a dropout prevention project funded by Alberta Education and Alberta/NWT Region Human Resources Development Canada, successor to Employment and Immigration Canada. START addressed dropout prevention through a variety of school and community initiatives primarily targeting students in the junior high school years. In the 1993-94 school year, 9 START projects were funded involving 7 jurisdictions with 14 schools and 741 students. This Provincial Perspectives report provides an overall view of the program as of June 30, 1994, summarizing and combining information from the year-end reports, and gives reports of the Culture Free Self Esteem Inventory taken by START students. Data from pretests and posttests with this instrument indicate that the START program had a generally positive effect on self-esteem of students. Evaluating consultants concluded that all projects were able to reduce dropouts significantly, with three of the projects appearing to be especially effective. All of the four schools that measured academic achievement documented some improvement in mathematics and reading that could be attributed to the project. The variety and complexity of the information made it impossible to determine the comparative effects of the various interventions. An appendix presents evaluation reporting forms. A separate 7-page "Evaluative Summary" has been appended. (Contains 1 figure, 2 charts, 12 tables, and 6 references.) (SLD)

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Evaluation of Alberta START Projects Provincial Perspective

Final Report

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Submitted:
November 7, 1994

by:

Nyberg Consultants Ltd.

to:

Policy and Planning Branch, Alberta Education

and

Programs Branch, Alberta/NWT Region Human Resources Development Canada
(formerly Employment and Immigration Canada)

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SPECIAL NOTE

The views expressed in this report are those of the researchers and not necessarily those of Employment and Immigration Canada or those of Alberta Education.

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The evaluation of the Alberta START projects was carried out under the direction of a steering committee consisting of:

Ann Harvey, Alberta Education Policy and Planning (Co-chair)
Al Cunningham, Employment and Immigration Canada (Co-chair)
Pat Anderson, Employment and Immigration Canada
Jenny Bain, Alberta Career Development and Employment
Phil Boyle, Alberta Education
Murielle St. Arnault-Christenson, Employment and Immigration Canada

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* CFSEI = Culture Free Self-Esteem Inventory

Introduction

On February 9, 1990, Barbara McDougall, then Minister of Employment and Immigration Canada, announced the Stay-in School Initiative. The Federal program, focused on reducing pupil dropouts, proposed spending $166.3 million across Canada on a new project over a four-year period. Alberta Education was invited by Canada Employment and Immigration to assist in making decisions regarding the Program. A joint agreement to this effect, involving Alberta Education, Canada Employment and Immigration, and Federal and Intergovernmental Affairs, was finalized on November 8, 1990. The new project was named the START Program.

All jurisdictions, including accredited private schools, were invited to submit proposals for START Program projects by December 21, 1990. Of the 55 proposals received, 10 were approved for funding. These were expected to involve an expenditure of approximately one million dollars for the period from March, 1991, to June, 1992. Five projects commenced immediately in March, 1991.

By the end of December, 1991, 11 separate projects, involving 9 jurisdictions and 24 schools, had been selected to receive funding, but by the end of the 1992-93 school year financial support had been withdrawn from two projects. In the 1993-94 year 9 START projects were funded involving 7 jurisdictions and 14 schools:

County of Smoky Lake No. 13 - 3 schools
- H.A. Kostash
- Vilna
- Waskatenau

Lethbridge School District No. 51 - 4 schools
- Allan Watson
- Gilbert Paterson
- Hamilton
- Wilson

Fort Vermilion School District No. 52 - 1 school
- High Level

Life Values School for Effective Education - 1 school
- Life Values School (St. Paul)

Edmonton R.C. School District No. 7 - 1 school
- (Based at the YMCA)

Calgary School District No. 19 - 3 schools
- Louise Dean
- Clarence Sansom
- Shaughnessy

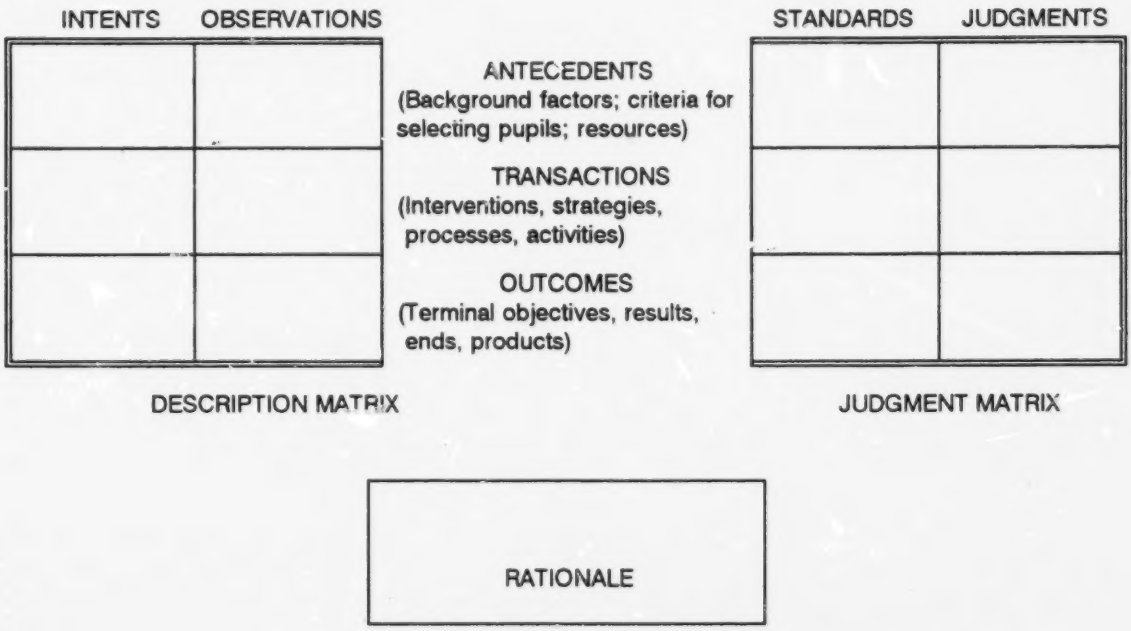
Lakeland R.C. Separate School District No. 150 - 1 school
- Assumption

By the end of June, 1994, all jurisdictions in which Project START operated had been visited at least twice each year by one member of the evaluation team. A report on individual projects under way during the 1993-94 school year was submitted in August, 1994. It was based on information gathered during the visits, telephone contacts, and on progress reports forwarded by the project directors.

This Provincial Perspectives report provides an overall view of the START Program as of June 30, 1994. It summarizes and combines information given in the Year-end Report for 1993-94 and gives results of Culture Free Self Esteem Inventory (CFSEI) not shown in the major report.

The organizing structure for the reports on all of the projects was based on the *Countenance Model* (Stake, 1967) described in the evaluation proposal submitted by Nyberg Consultants Ltd. in December of 1991. The model is shown below, with additions in

Figure 1 - The Countenance Model



parentheses intended to clarify some of the terms used in the rows of the matrix. Throughout the reports, the term **Background Factors** was used in place of **Antecedents**, and **Interventions** replaced **Transactions.**

The purposes of the evaluations were to identify effective techniques for reducing dropouts, and also to provide information useful to decision-makers at local, provincial and federal government levels in improving, extending or terminating projects. Managers of local school district projects were slated to receive reports pertaining to all projects and the report about provincial aggregations and perspectives.

A new procedure (labelled the two-count system) for distributing funds to school boards was initiated in 1992. The basis for major allowances (such as the basic per-pupil grant) traditionally has been the number of students enrolled in a district in September. The new system was based on the average of two reporting times, September 30 and April 30. This system affected how schools regarded and dealt with "at risk" students because every dropout resulted in a reduction in grants. Special efforts to keep "at risk" students in school might more than pay for themselves.

Evaluation Restrictions and Exclusions

Judgments about interventions were based on "soft" standards such as comparisons with similar activities elsewhere or in the past, descriptions from the literature, normative practices and what logically appears to be a preferred practice. An example from the literature was the strong relationship between time on task and learning. If project pupils appear to be deficient in time and/or concentration on academic tasks, then judgments about shortcomings in this area could be made.

The evaluation procedure which has been universally applied to public school program evaluations has been called the Accreditation Model (Sanders and Worthen, 1972). It has been used almost exclusively in this province and elsewhere for the evaluation of instructional procedures (or interventions). The procedure is totally reliant on the knowledge, experience, and expertise of those called upon to make ratings and judgments. It is this model which continued to be used in rating and evaluating the interventions which make up the "process" portions of START projects using self-study by participants, visitations by consultants and reports from school jurisdictions.

Outcomes for self esteem, as measured by the Culture Free Self Esteem Inventory (CFSEI), were based on a test administered in the fall of 1993 and again in the spring of 1994. Analysis of changes depended upon matching answer sheets by student for both tests. Scores for any student for whom data were not present for both sessions were not included in the analysis. Similarly, data for any student who was tested in both fall and spring was excluded if test sheets could not be matched with the student. The number of exclusions because of mismatches was not as large as in previous years; however, Clarence Sansom START students were excluded from

the testing because it was not considered appropriate, and at Vilna School there was a refusal to administer the test in the spring.

Project Rationale

The external evaluators continued to use the statements enunciated in underlying rationales (beliefs, theories, assumptions, goals, values, and so on) for each project. No changes of significance took place since the previous year. All START Project staff continued to exude optimism and a faith in nearly all of the local interventions as appropriate solutions to the dropout problem. The reasoning used as justification and support remained unchanged; however, Edmonton Catholic mentioned several interventions that would be modified or discontinued.

Project managers and proposal writers in general have a tendency to be overly optimistic and ambitious during the planning stages of a project. For the program under review this was most evident in sections dealing with commitments about evaluation. Sometimes the procedures outlined connoted a great underlying concern about matters such as student feedback, parental and community interest and support, general day-to-day class functioning, behaviour changes in pupils, assignment and homework completion, pupil participation in school activities, and survey feedback from participants and project "partners". With one exception, none of the foregoing facets subsequently emerged as a source of data for local evaluation contributions.

In contrast, Life Values provided a very lengthy series of rationale statements. These contained many goals which were not easily achieved and assumptions about parents and students that did not always apply in specific cases. However, the project staff was consistent in adhering to these beliefs, assumptions, and goals. Further, they seemed willing to be held accountable and the rationale statements comprised a set of standards against which they could be judged.

Minimum Data Requirements

While the rationale for each project remained relatively constant, the various facets such as interventions, and outcomes, not to mention the START participants, changed each year and had to be reported. A minimum set of data were required from each project each year, and in 1993-94 the following forms (copies are shown in Appendix 1) were used to facilitate and standardize the transfer of information to the external evaluators:

Background and attendance of students (details such as age, grade, and attendance in the baseline year were supplied);
Interventions (a brief description of each START component was provided, along with a success rating);

Report on dropouts and transfers (this listed students who dropped out of school or transferred during the year);
Follow-up report on 1992-93 START students (this gave information on what last year's students were doing in 1993-94).

Depending upon the terms of a project, additional data, such as achievement scores on tests, might also be required.

Background Factors

Characteristics of Pupils

The most important project elements which guided the choice of type and direction of interventions and support were the needs and characteristics of students. Tables 1 and 2 describe some of the characteristics which were recorded on forms submitted by participating school systems during Year 2 and Year 3 of the project.

Table 1 indicates that, in 1993-94, 741 pupils had been identified as Project START members. This represented a decrease of 132 (15.1%) from the count at the end of Year 2. The decrease indicated that significantly fewer pupils were being served with reduced resource levels. However, all projects did not enrol fewer pupils than were identified with START at year-end 1992-93. Showing decreases were (percent decrease bracketed): Parkland (100%), High Level (33.8%) Smoky Lake (23.5%), Life Values (27.6%), and Lethbridge (9.1%). The project enroling an increased numbers of students was Lakeland Catholic (13.8%), while the remaining projects showed minor changes or no change in enrolment: Edmonton Catholic, Clarence Sansom, and Louise Dean. The Parkland County project was discontinued for 1993-94, accounting for the 100 percent reduction.

The recording forms (see Appendix 1) asked record keepers to differentiate between pupils "new" to the project in 1993-94, and those "continuing", that is enroled in 1992-93. In two-thirds of the projects the number of newcomers outnumbered continuing students. Overall, the ratio was about 6 to 4 (57.4% to 42.6%). In two projects the reverse took place: at Smoky Lake 82.7 percent (70.6% last year) were continuing students and at Life Values the percentage was 66.7 (52.0% in 1992-93). Decreases in enrolment occurred at Life Values, Smoky Lake, Lethbridge and High Level.

In sheer numbers the largest decrease from year-end 1992-93 was at Lethbridge, which showed a drop in enrolment of 40. With a membership of 438, Lethbridge had the largest project in the province. Over one-half (59.1%) of the provincial total was being served there.

Table 1 - Enrolments in START Projects for 1993-94 and Baseline Attendance

Jurisdiction	Group	Grades 6 - 9 Number	Grades 6 - 9 %	Grades 10 - 12 Number	Grades 10 - 12 %	Total Number	Total %	Baseline Attendance Number	Baseline Attendance %	No Data Number
Smoky Lake	Continuing	18	34.6	25	48.1	43	82.7	39	91.2	4
	New	7	13.5	5	3.8	9	17.3	9	86.4	-
	Total	25	48.1	27	51.9	52	100	48	90.3	4
Life Values	Continuing	13	61.9	1	4.7	14	66.7	14	69.9	-
	New	5	23.8	2	9.5	7	33.3	5	60.0	2
	Total	18	85.7	3	14.3	21	100	19	67.3	2
Lakeland Catholic	Continuing	10	16.9	6	10.2	16	27.1	15	67.7	1
	New	32	54.2	11	18.6	43	72.9	31	87.1	12
	Total	42	71.2	17	28.8	59	100	46	87.3	13
Lethbridge	Continuing	162	37.0	-	-	162	37.0	138	90.4	24
	New	271	61.9	5	1.1	276	63.0	227	91.6	49
	Total	433	98.9	5	1.1	438	100	365	91.1	73
High Level	Continuing	25	47.2	-	-	25	47.2	22	90.0	3
	New	24	45.3	4	7.5	28	52.8	24	90.7	4
	Total	49	92.5	4	7.5	53	100	46	90.4	7
Shaughnessy	Continuing	-	-	47	72.3	47	72.3	39	90.8	8
	New	-	-	18	27.7	18	27.7	13	87.1	5
	Total	-	-	65	100	65	100	52	89.9	13
Clarence Sansom	Continuing	5	38.5	-	-	5	38.5	4	97.6	-
	New	8	61.5	-	-	8	61.5	5	92.4	4
	Total	13	100	-	-	13	100	9	94.7	4
Edmonton Catholic	Continuing	-	-	4	13.8	4	13.8	2	22.0	2
	New	-	-	25	86.2	25	86.2	2	62.0	23
	Total	-	-	29	100	29	100	4	42.0	25
Louise Dean	Continuing	-	-	-	-	-	-	-	-	-
	New	-	-	11	100	11	100	11	41.3	-
	Total	-	-	11	100	11	100	11	41.3	-
All Jurisdictions	Continuing	233	31.4	83	11.2	316	42.6	273	88.9	42
	New	347	46.8	78	10.5	425	57.4	327	87.6	99
	Total	580	78.3	161	21.7	741	100	600	88.2	141

Table 1 also indicates that the highest proportion of pupils served was at junior high school grade levels (78.3%). Only Smoky Lake County, Edmonton Catholic and Shaughnessy High School differed markedly from the norm, with 51.9 percent, 100 percent, and 100 percent, respectively, registered in senior high school.

One of the outcomes measures for the evaluation was changes in percentage of days attended by START pupils. In preparation for this computation at year end, project staffs were asked to record the percentage of attendance for the baseline year for each student. The baseline year was 1991-92, or earlier for continuing students. The baseline year for new students, who commenced in 1993-94, was 1992-93. Table 1 also displays these data for pupils for whom the information was available. Overall, the average percentage of baseline years' attendance of 88.1 was about six points lower than the norm for Alberta junior high school classes. There were minor differences between new and continuing START pupils with regard to this aspect of their school history: continuing students were slightly better attenders during their baseline year than were the new students (88.9% *vs*. 87.4%).

The best overall description of the total START Program group for the province is the profile of descriptors shown in Table 2. Listed there, in rank order of frequency of use, are the reasons reported for identifying the 1992-93 START students as at risk of dropping out of school. The reasons listed by the schools in January, 1992, were used to develop a checklist which corresponds to Table 2. It is assumed that the same selection criteria were applied during Year 3 (1993-94) of the project. There is evidence to support the assumption that the reasons for placing students in the START project are rather stable. The correlation between the percentage of pupils identified in each of the 29 categories in Year 1 and Year 2 was 0.84.

Table 2 records that the seven most frequently used indicators, in order of frequency of use with the percentage for 1992-93 and the 1991-92 rankings (noted in parentheses), were as follows:

Lack of academic progress (73.7%, 1st)
Low motivation in academic subjects (41.4%, 11th)
Low self-concept (36.5%, 7th)
Social-emotional problems (32.6%, 3rd)
Negative attitude toward school (26.6%, 6th)
Chronic absence (23.5%, 2nd)
Unstable living situation (22.8%, 4th)

As stated above, the indicators listed in Table 2 were generated by project staff submitting background reports on students in 1991-92. It is noteworthy that not a single indicator referred to psychological handicaps; for example mental retardation, learning disabilities, dyslexia, etc. Learning disabilities have been shown to be a characteristic of a high proportion of juvenile and adult

Table 2 - Reasons for Identifying Students as "At Risk"

Year 1 Ranking	Indicators	Number	Provincial Totals %ge	Year 2 Ranking
1	Lack of academic progress	507	73.7	1
11	Low motivation in academic subjects	285	41.4	2
7	Low self-concept	251	36.5	3
3	Social-emotional problems	224	32.6	4
6	Negative attitude toward school	183	26.6	5
2	Chronic absence	162	23.5	6
4	Unstable living conditions	157	22.8	7
8	History of early failure in school	115	16.7	8
5	Chronic tardiness	96	13.9	9
13	Behaviour disorder	89	12.9	10
23	History of trouble with authorities	77	11.2	11
14	Drug or alcohol abuse	68	9.9	12
16	No participation in extracurricular activities	65	9.4	13
17	Negative attitude toward school	63	9.2	14
10	Anecdotal information	60	8.7	15
9	Other reasons	58	8.4	16
20	Teen parenthood	51	7.4	17
22	Alienation from other students	50	7.3	18
21	Short range problem solver	49	7.1	19
15	Previously dropped out of school	42	6.1	20.5
27	Lack of a support system	42	6.1	20.5
19	Low self-esteem test scores	40	5.8	22
18	Self referral or by family	34	4.9	23
24	Lacking in social skills	27	3.9	24
29	Lack of previous schooling	17	2.5	25
12	History of medical problems	15	2.2	26
25	ESL student	14	2.0	27
26	Recent immigrant	12	1.7	28
28	Pregnancy	4	0.6	29

detention facility populations. They are by far the most common handicapping condition affecting school achievement. Estimates about incidence range from 5 percent and higher, depending upon the community. Since junior and senior high schools typically do relatively little to accommodate pupils with specific learning disabilities it is not surprising that those associated with Project START have not mentioned them as a background factor.

It is common for teachers to refer for diagnostic assessment pupils who rank at or near the bottom on academic achievement even though they may not be significantly underachieving. Frequently missed are those who achieve at or near the average who are drastically underachieving. However, it is the low achiever, working at expectation, who is likely a prime candidate for dropping out, having had a school history of frustration and failure. Since low academic achievement was reported as a reason for selecting nearly three quarters of the START group, many of the current members likely are of this type. Without question, improved success at school tasks must be experienced to induce them to continue attending.

Resources Provided by START Funding

Few changes occurred since the 1991-2 school year in the deployment of START Project funds. Most projects continued to use nearly all the funding for personnel and related expenses. The exception was Shaughnessy High School, which directed much of the funding to computer lease and courseware purchase for the computer assisted instruction (CAI) program. With reduced numbers in START in 1992-3 the per-pupil cost at Shaughnessy increased accordingly.

Funding for all START projects ended in March, 1994, and the result in several cases was reduced activity. While all of the projects were continued through support from local authorities, in some cases the START activities were diminished. Some schools made reductions in September in anticipation of the cuts to come.

Table 3.1 lists the schools or jurisdictions which accessed project funds during 1992-93, the second year of the program. This year was chosen because all projects were in operation for the full year and enrolments had stabilized and tended to be at a maximum.

Table 3.1 indicates that nearly a ten-fold difference separated the projects at the extremes of the range of the per-pupil costs. Lethbridge, at $320 per pupil, was least costly and Clarence Sansom School, at $3,093, was most expensive. While both employed lower costing paraprofessionals, only, the difference was due to the frequency, intensity, and duration of one-on-one contact with START pupils: The ESL Job START project at Clarence Sansom devoted more time to individualized tutoring, teaching, and counselling on a per-pupil basis than Project Connections at Lethbridge. The nature of student backgrounds (for example, no English language facility at ESL Job START, and little or no prior schooling) dictated the

need for the more expensive program at Clarence Sansom School.

Table 3.1 - Per-Pupil Costs of START Projects in Year 2

School/Jurisdiction	START Funding ($)	Number of Pupils	Per-Pupil Costs ($)	Rank
Lethbridge	152,828	478	320	1st
Edmonton Catholic	95,268	80*	1,191	2nd
High Level	116,789	80	1,460	3rd
Lakeland Catholic	99,400	55**	1,807	4th
Shaughnessy	102,164	50**	2,043	5th
Smoky Lake	142,576	68**	2,097	6th
Louise Dean	24,339	11**	2,213	7th
Life Values	79,979	29	2,758	8th
Clarence Sansom	40,206	13	3,093	9th
Parkland County	126,791	59***	2,149	10th
TOTALS	980,340	923	Average = 1,062.12	

* Edmonton Catholic reported using project funds to maintain a full complement of 80 pupils in their Fresh Start Program. Only 30 were designated as START members for evaluation record keeping purposes.
** These projects reported that START funds benefitted more pupils than the number officially designated.
*** Most of the 59 pupils did not receive START project service until the spring term. Ranking was altered to reflect this.

All infrastructure, administration, coordination, and other support service costs at Lethbridge and Clarence Sansom were financed by District funds and not from START grants. These arrangements also applied to several other projects. In contrast, record keeping for evaluation purposes was paid for from START grants in two projects (an arrangement which the External Consultants heartily endorse). Other projects quite legitimately used project money to purchase remedial teaching materials and aids of long term benefit to any pupil in the school. In a few instances the costs of professional development workshops, seminars, and inservice of project staff were funded by START. On one occasion several days of inservice for regular teaching staff were partially funded from this source.

The major costs were for project personnel. The significant variable here was whether they were being paid as professional teachers or counsellors (especially those on maximum salaries) or as paraprofessionals. The latter were more economical to employ.

The background of the pupils, their readiness and capabilities for coping with school tasks, and their previous experience with schools were directly related to the type and intensity of programs planned, and the degree of attention given to individuals (and per-pupil costs). The pupils at Clarence Sansom and Life Values, for example, required the high per-pupil cost programs because of the extreme deficits in their backgrounds and skills.

Table 3.2 gives a summary of the funding provided to the various projects for each of the three years during which START was active. The jurisdictions are listed in the same order as in Table 3.1. Smoky Lake received the largest grant and Louise Dean the smallest.

Table 3.2 - START Funding by Project and Year

Project	Year	Time Beginning Date	Ending Date	Duration	Support ($)
Lethbridge	1	August 2, 1991	June 20, 1992	10½ months	147,086
	2	August 31, 1992	June 30, 1993	10 months	152,828
	3	August 27, 1993	March 31, 1994	7 months	107,558
	1 - 3	August 1991	March 31, 1994	27½ months	407,472
Edmonton Catholic	1	Dec. 3, 1991	June 20, 1992	6½ months	85,032
	2	August 31, 1992	June 30, 1993	10 months	95,268
	3	August 30, 1993	March 31, 1994	7 months	71,729
	1 - 3	Dec. 3, 1991	March 31, 1994	23½ months	252,029
High Level	1	May 6, 1991	June 30, 1992	14 months	130,341
	2	August 31, 1992	June 25, 1993	10 months	116,789
	3	August 30, 1993	March 31, 1994	7 months	102,666
	1 - 3	May 6, 1991	March 31, 1994	31 months	349,796
Lakeland Catholic	1	March 4, 1991	March 4, 1992	12 months	121,302
	2	Sept. 1, 1992	June 30, 1993	10 months	99,400
	3	Sept. 1, 1993	March 31, 1994	7 months	58,608
	1 - 3	March 4, 1991	March 31, 1994	29 months	279,310
Shaughnessy	1	March 4, 1991	June 28, 1992	16 months	79,458
	2	Sept. 1, 1992	June 30, 1993	10 months	102,164
	3	Sept. 1, 1993	March 31, 1994	7 months	80,264
	1 - 3	March 4, 1991	March 31, 1994	33 months	261,886
Smoky Lake	1	March 1, 1991	June 30, 1992	16 months	178,124
	2	Sept. 1, 1992	June 30, 1993	10 months	142,576
	3	Sept. 1, 1993	March 31, 1994	7 months	91,745
	1 - 3	March 1, 1991	March 31, 1994	33 months	412,445
Louise Dean	1	Sept. 3, 1991	June 30, 1992	10 months	19,450
	2	Sept. 3, 1992	August 31, 1993	10 months	24,339
	3	Sept. 1, 1993	March 31, 1994	7 months	14,523
	1 - 3	Sept. 4, 1991	March 31, 1994	27 months	58,312
Life Values	1	March 1, 1991	June 30, 1992	16 months	101,500
	2	July 1, 1992	June 30, 1993	12 months	77,979
	3	July 1, 1993	March 31, 1994	9 months	57,699
	1 - 3	March 4, 1991	March 31, 1994	37 months	237,178
Clarence Sansom	1	March 25, 1991	March 6, 1992	11½ months	34,900
	2	Sept. 8, 1992	June 30, 1993	10 months	40,206
	3	Sept. 1, 1993	March 31, 1994	7 months	26,099
	1 - 3	March 4, 1991	March 31, 1994	28½ months	101,205
All Nine Projects	1	March 1, 1991*	June 30, 1992*	16 months**	897,193
	2	July 1, 1992	June 30, 1993	12 months	851,549
	3	July 1, 1993	March 31, 1994	9 months	610,891
	1 - 3	March 1, 1991	March 31, 1994	37 months	2,359,633

*These dates are the extremes; that is, the earliest starting date, and the latest ending date.
**These figures are maximum values in the column above.

Planning, Initiating, and Administering Projects

The extent to which a project succeeded and remained viable over time appeared to be directly related to the cooperation, commitment and "ownership" exhibited by the school staff it was intended to assist. Successful, long-lived projects required that the schools in which they were centred be given leadership and initiation responsibilities in planning the project and implementing it after approval. At Lethbridge, for example, the four junior high schools shared in preparing a District proposal, each submitting slightly differing plans for final implementation. This was in keeping with a District policy which recognized that individual differences among schools existed with respect to educational philosophy, community and student needs, and preferences about organization and deployment of staff. The policy also recognized that if high levels of motivation, energy, and adaptability were to be achieved, schools needed to be allowed to proceed in their own ways.

Projects which were judged to be least successful during the early stages were notably lacking in involving schools in the initial planning and subsequent implementation.

Interventions

Components of Interventions

Chart 1 provides overview information about the number of START Project pupils receiving direct benefit from each intervention. Project reporters were asked to provide both a success rating and a description of each component on a form entitled "Staff Report on START Components for '93-'94" (see Appendix 1). The description gave the number of pupils served by the component and the judgments by local project staff about how successful the project component had been in providing assistance to pupils. For this rating of success a scale of 1 to 5 was used, with 1 indicating low, and 5 a high degree of success. Chart 2 shows the average rating (weighted according to the number of students in each component) of each START Project component across all of the jurisdictions.

Only components funded by Project START are displayed in Chart 1 and Chart 2. For example, at Louise Dean School, career assistance and self esteem/personal development activities were experienced. However, because they were not financed by Project START they were not listed in the report submitted by the school. Omissions also occurred simply because they were not reported at year-end. Some jurisdictions, for example, did not report counselling, perhaps because it had not been scheduled in formal, structured settings. Other examples were "Attendance Monitoring" (which all were required to do to meet their evaluation obligations) and "External Agency Liaison." At year end, follow-up data on START "graduates" were required. On balance, it is the view of the evaluators that, for some interventions, numbers of pupils served which are displayed in Chart 1 were underestimates.

Chart 1 - Pupils Reported in each START Component at Year-End

	Jurisdiction number									Totals	
Intervention	1	2	3	4	5	6	7	8	9	No.	%
Total START pupils	52	438	53	21	59	29	65	11	13	741	100
Counselling	52	173	-	21	59	29	49	-	-	383	52
Tutoring	-	222	13	21	59	29	-	-	13	357	48
Achievement testing/monitoring	-	-	-	-	59	-	65	11	13	148	20
Incentive program	52	94	-	-	-	-	-	-	-	146	20
External agency liaison	-	82	-	-	-	-	49	-	-	131	18
Study skills/final exam preparation	-	65	-	-	59	6	-	-	-	130	18
Special classes/academic interv'n	-	43	53	-	-	29	-	-	-	125	17
CAI	-	-	50	-	-	29	46	-	-	125	17
Career assistance	52	-	-	-	59	-	-	-	-	111	15
School Liaison Officer	-	110	-	-	-	-	-	-	-	110	15
Work experience/work shadowing	62	-	4	21	-	8	-	N/A	6	101	14
Attendance monitoring	-	76	-	21	-	-	-	-	-	97	13
Native awareness/crafts	-	18	-	-	59	-	-	-	-	77	10
Bulletin board	-	-	-	-	59	-	-	-	-	59	8
School van/food booth	-	-	-	-	59	-	-	-	-	59	8
Family liaison/home visits	N/A	-	-	21	-	-	21	-	13	55	7
Inservice to teachers	52	-	-	-	-	-	-	-	-	52	7
Peer support/native girls	N/A	20	12	-	11	-	-	-	-	43	6
Community involvement	-	40	-	-	-	-	-	-	-	40	5
Classroom assistance	-	-	-	-	40	-	-	-	-	40	5
Mentoring	27	-	-	-	11	-	-	-	-	38	5
Off campus alternate	-	-	-	-	5	29	-	-	-	34	5
Parent support/parenting	-	31	-	-	-	-	-	-	-	31	4
Mini teaching units	-	-	-	-	-	29	-	-	-	29	4
Self esteem/personal development	-	25	-	-	-	-	-	-	-	25	3
Stress/anger/aggression managem't	-	6	-	-	-	-	17	-	-	23	3
Child care facility/young mothers	-	16	-	-	-	-	5	11	-	33	2
Computer literacy	-	-	-	-	-	-	-	-	13	13	2
Other interventions	N/A	21	N/A	-	-	-	-	11	13	45	6

Jurisdiction code: 1 = Smoky Lake 3 = High Level 5 = Lakeland 7 = Shaughnessy 9 = Clarence Sansom
2 = Lethbridge 4 = Life Values 6 = Edmonton Catholic 8 = Louise Dean

N/A = No data were submitted

Chart 2 - Average Success Ratings by Jurisdictions of START Components

Intervention	Jurisdiction number 1	2	3	4	5	6	7	8	9	No.	Average Rating
Total START pupils	52	438	53	21	59	29	65	11	13	741	
Self esteem/personal development	-	5.0	-	-	-	-	-	-	-	25	5.0
School Liaison Officer	-	4.9	-	-	-	-	-	-	-	110	4.9
Stress/anger/aggression managem't	-	4.5	-	-	-	-	5.0	-	-	23	4.8
External agency liaison	-	4.5	-	-	-	-	5.0	-	-	131	4.7
Off campus alternate	-	-	-	-	3.0	5.0	-	-	-	34	4.7
Work experience/work shadowing	5.0	-	N/A	5.0	-	2.0	-	5	4.0	101	4.7
Counselling	5.0	4.4	-	4.0	4.9	5.0	4.9	-	-	383	4.5
Family liaison/home visits	4.0	-	-	4.0	-	-	5.0	-	5.0	55	4.6
Incentive program	5.0	4.0	-	-	-	-	-	-	-	146	4.3
Tutoring	-	4.0	5.0	3.0	4.7	4.0	-	-	5.0	357	4.1
Study skills/final exam preparation	-	4.0	-	-	4.5	2.0	-	-	-	130	4.1
Native awareness/crafts	-	5.0	-	-	3.8	-	-	-	-	77	4.1
Mentoring	4.0	-	-	-	4.5	-	-	-	-	38	4.1
Achievement testing/monitoring	-	-	-	-	N/A	-	4.0	5.0	3.0	148	4.0
Special classes/academic interven'n	-	4.0	4.0	-	-	4.0	-	-	-	125	4.0
Attendance monitoring	-	4.0	-	4.0	-	-	-	-	-	97	4.0
CAI	-	-	4.0	-	-	4.0	3.1	-	-	125	3.7
Peer support/native girls	4.0	2.8	4.0	-	4.0	-	-	-	-	43	3.4
Career assistance	5.0	-	-	-	N/A	-	-	-	-	111	5.0
Inservice to teachers	5.0	-	-	-	-	-	-	-	-	52	5.0
Mini teaching units	-	-	-	-	-	5.0	-	-	-	29	5.0
Computer literacy	-	-	-	-	-	-	-	-	5.0	13	5.0
School van/food booth	-	-	-	-	4.9	-	-	-	-	59	4.9
Classroom assistance	-	-	-	-	4.6	-	-	-	-	40	4.6
Child care facility/young mothers	-	N/A	-	-	-	-	4.0	5.0	-	33	4.5
Community involvement	-	4.0	-	-	-	-	-	-	-	40	4.0
Parent support/parenting	-	4.0	-	-	-	-	-	-	-	31	4.0
Bulletin board	-	-	-	-	3.5	-	-	-	-	59	3.5
Other interventions	N/A	3.8	N/A	-	-	-	-	5.0	4.0	45	4.2

Jurisdiction code: 1 = Smoky Lake 3 = High Level 5 = Lakeland 7 = Shaughnessy 9 = Clarence Sansom
2 = Lethbridge 4 = Life Values 6 = Edmonton Catholic 8 = Louise Dean

N/A = No data submitted

In Chart 1 the interventions are arranged in descending order of the percentage of students involved in each. Several interventions that involved only a few students (about 1% in most cases) were grouped together and labelled "Other interventions." They were:

Peer help to teachers (number served not given by Smoky Lake);
Drug free assistance (9 students served at Lethbridge);
Recovery assistance (5 students served at Lethbridge);
Attention deficit program (7 students served at Lethbridge);
Extra curricular activities (13 students served at Clarence Sansom; number not available at High Level).
Three components unique to Louise Dean school did not fit into the regular classification scheme: Risk assessment, Child care worker, and Outreach.

Chart 2 interventions are broken into two groups, then arranged in descending order of ratings given by START personnel. The upper part of the page shows interventions that were rated by two or more raters in more than one school, while the lower part gives figures for interventions rated by a START teacher in two or more schools or several START teachers acting in one school only.

Overall, the ratings of the interventions were strongly positive. The highest ratings (in order) for the interventions reported by more than one school were as follows:

1. Self esteem/personal development, rated 5.0 with 25 students served in two of the Lethbridge schools;

2. School Liaison Officer, rated 4.9 with 110 students served;

3. Stress/anger management, rated 4.8 with 27 students served;

4. External agency liaison, rated 4.7 with 131 students served;

The lowest ratings in this group were:

1. Peer support/native girls, rated 3.0 with 31 students served;

2. CAI, rated 3.7 with 96 students served in 3 schools.

The interventions reported by only one school were generally higher than those serving students in two or more schools. A rating of 5.0 was given in four instances, and only one was below 4.0.

The interventions described below are in the same order as they are listed in Chart 2, with some exceptions where a number of components were dealt with under one heading.

- Self Esteem and Personal Development

Chart 1 indicates that 3 percent of the START members attended

special classes or group discussion sessions aimed at developing self-esteem, a sharp drop from the 10 percent registered in 1992-93. Edmonton Catholic, Shaughnessy, and Assumption did not report continuation of this component. Only two schools in Lethbridge listed this as part of the program.

- School Liaison Officer

This component, which served 110 students, was applied in all of the Lethbridge schools. The primary functions were communicating with external agencies, counselling pupils and their parents, mediating between pupils and school staffs, assisting START project staff, and follow-up surveillance and intervention.

- Stress and Anger Management; Drug-Free Challenge; Young Mothers Group; Attention Deficit Program; Parent Support Group

These five components were listed in the Interventions section of the complete Year 3 report for Project Connections at Lethbridge. Numbers of students served in each ranged from 4 to 16. The components were aimed at very specific problem areas which characterize each small group. The titles define these areas.

- External Agency Liaison (Social Services and Mental Health)

Only three projects reported pupils as having been referred to, or contacted by, agencies external to the school. About 21 percent were identified in this fashion (Chart 1). The success rating was quite high, a pronounced improvement from last year (Chart 2). The improvement was due to higher success ratings by Lethbridge. Apparently the outside agencies there improved their perceptions about the CYCWs (Child and Youth Care Workers), and they are more positive now since communication has improved.

The referrals or contacts signify problems of considerable magnitude and complexity which are not easily ameliorated. All schools with projects needed to refer START pupils; however, most have not included it as a project component, presumably because others in the school make the referrals.

- Off-Campus Alternate Program

Industrial Education courses have been offered by Assumption School during the three years of the project. The subjects were, Beauty Culture, Autobody, Food Preparation, and Automotives. Theory was taught mainly at the school and the practicum at business sites in Grande Centre. Participating employers seem willing to continue their involvement in 1994-95. In a school with a narrow set of programs these offerings were a very welcome addition.

The Edmonton Catholic system's Fresh Start program was entirely off campus and operated as an alternate to conventional schools. While

it served students who were reluctant to attend regular schools, one of the objectives was to return them to those schools.

• Work Experience and Work Shadowing

Work Placement in some form had been accomplished for 62 pupils enroled in START. This represented 8 percent of the START group, a relatively small proportion since junior high age pupils were difficult to accommodate. Smoky Lake enroled a large percentage of high school students and Life Values served all pupils. In the consultants' comments about Life Values School it was noted that a highlight there was the successful work experience placements for native pupils. For them the experience was truly novel since it was not part of local culture or the family expectations. Project staff ratings of success for work placement and shadowing were very high, at 4.5.

• Counselling

The specific form of help provided most frequently to the START pupils was Counselling. One half of the provincial START students at mid-year were reported to have been assisted in this way. Academic, personal, and vocational counselling took place one-on-one and in small groups. The START project pupils appeared to be very receptive to the help provided. The success rating of 4.6 recorded on Chart 2 was likely ranked quite accurately. Those counselled had difficult and challenging attributes. For many, their personal, family, or interpersonal problems were so severe that resolving them was difficult. The proportion of the total reported as counselling clients (50%) would have been high risk pupils in definite need of support.

• Family Liaison and Home Visits

Considering the nature of the students enroled in START, the need was high for this type of intervention. The success rating average was quite high. Of necessity, these activities were required in all projects, but in some cases they simply were not elevated to the status of a project component. In the three projects reporting number of pupils served in this way, the ratings were high.

• Incentive Program

An incentive program was ranked fifth in numbers of START project students served (Chart 1). The success rating by the two projects which assigned project component standing to this aspect of the program was 4.0 or higher on the 5-point scale (Chart 2). The program at Smoky Lake schools was called "Building Successes" and it involved all staff members and the total student body. Many formal occasions were used to recognize student efforts and development. At all project schools there was a concerted attempt to recognize individuals, and extend to them courtesy and respect.

Two schools at Lethbridge, in addition to routine positive reinforcement, had a systematized token economy in place wherein pupils accumulated points that eventuated in claims for prizes.

• Tutoring

Tutoring was a significant intervention in six of the nine 1993-94 projects reviewed in this report. Nearly one-half (48%) of the total provincial START group of pupils received this help in some form. This intervention took different forms in different jurisdictions, and some of these variations warrant description.

In one jurisdiction, High Level, high school students served as tutors for 13 pupils. These people were volunteers, good students in their own right, and recommended for the job by their own teachers. In High Level the tutors were not paid but received high school credits for Special Projects. The one-on-one sessions took place during regular school hours. The instructional content was prescribed by the START teacher, and involved activities such as answering workbook questions on a reading passage, doing a specific written assignment, or drill in mathematics.

In Lethbridge most of the tutors were Faculty of Education undergraduates from the University of Lethbridge. At Life Values and Clarence Sansom the service was provided, as required, by native and cross cultural paraprofessionals. In Edmonton Catholic, tutoring was done by the teachers and was actually the mode of instruction in the academic subjects (along with teaching in small groups) much of the time. At Lakeland Catholic (Assumption) native tutors were replaced in 1993-94 by a Youth Care Worker who also served as a classroom aide.

At Lethbridge, over three years of the project, a number of changes evolved in the tutoring component, especially in communication with teachers and (in one school) the role of tutors. More two-way communication and increased frequency concerning teachers' assignments had been incorporated with the record keeping. In one school a tutor functioned mainly as a classroom aide, spending part of the time helping in the classroom and the remainder elsewhere one-on-one or in small groups. The focus was almost entirely mathematics. In another school parents were encouraged to employ their own tutors, frequently pairing up with another family.

As noted above in the description about counselling, tutors tended to be good listeners and confidants. Their roles frequently included counselling.

The feedback from regular class teachers, the pupils, and their families appeared to warrant the relatively high average success rating of 4.1 (Chart 2). For those projects which elected to offer tutoring it is viewed as a very necessary component in any dropout prevention program. High Level school, with its special remedial

classrooms and Clarence Sansom were the other projects which were premised on the notion that direct assistance to pupils to succeed in school work needs to be accorded high priority.

• Study Skills/Final Exam Preparation

Formal groups were organized in 3 schools to help START students develop better study skills. They took the form of practice and tutelage in reviewing and test-taking (Lethbridge), a commercially prepared program for teacher use (Assumption) and CAI courseware (Edmonton Catholic). Another efficient vehicle for providing such instruction could be the tutoring sessions being used in six of the projects. Here transfer of the study skills to homework and review assignments could be made directly. Pupils would then be provided with an opportunity to deal with the concrete instead of the abstract in learning and applying study skills.

• Native Awareness/Crafts

Native Liaison Workers at Assumption School and Lethbridge have been major contributors to the Native Awareness and native Crafts components. Native Awareness days, native speakers, and entertainers and Native Club activities have been used. Introductions to native crafts have been used as well to overcome shyness and to enhance personal pride and self-esteem.

• Mentoring

Two projects mentioned Mentoring as a project component. At Smoky Lake mentors consisted of volunteers from the community. At the Assumption School, Special Projects high school credits were offered for this service. Staff at the latter location were well satisfied by the quality and quantity of the student assistance provided. Over all, 38 pupils (5.1% of the total) were supported in this way.

• Achievement Testing/Monitoring

Four projects included assessment/monitoring (as well as diagnosis) as a project component. In one school the resource room remediation specialist provided the profile information requested for each student. The results were potentially useful in guiding instruction but could also be useful in evaluation by providing the baseline for gain scores.

Since many of the START Project members were special needs students it is noteworthy that these were the only projects alluding to the usefulness (and use) of academic test results.

• Special Classes/Academic Intervention

Conventional pull-out Resource Rooms made up the START project at

High Level School. Here the students were provided modified and remedial programs in Language Arts and Mathematics or both. During the remainder of the day they were integrated with regular classes in the other subject fields. Edmonton Catholic, which operated a learning centre well removed from conventional schools, in effect operated the equivalent of resource rooms. A feature of their instructional ventures was the use of several YMCA programs. The special class arrangements were rated as reasonably successful (4.0). They were aimed directly at the most frequently used reasons for selecting students for START; namely, low academic achievement and low motivation in academic subjects.

The Academic Intervention Classroom at the Wilson School in Lethbridge was also rated a 4 on the success scale. It provided a venue for help to individuals and small groups in completing assignments. The project CYCW also provided remedial instruction and re-teaching in the classroom, as required.

- Attendance Monitoring

Keeping track of attendance was accorded project component status in some schools. Chart 1 indicates that one-fifth of the START groups, provincially, were subjects of close scrutiny in this area. As noted elsewhere, all projects undertook this responsibility in order to fulfil commitments about reporting. The success ranking was about average (Chart 2), an improvement over last year's rating.

- Computer Assisted Instruction (CAI)

The major use of CAI as a project component was at Shaughnessy School. The courseware in use at Shaughnessy in Mathematics, Reading, and Written Expression contributed to making this component quite successful during Year 1 and Year 2 of the program. During Year 3, however, marked declines in gains were recorded in Mathematics and Reading. The external consultant concluded that these reductions might be due to one or more of (a) removal of the CAI director from coordinating the component; (b) assignment of regular teaching staff to full responsibility for CAI; or (c) reducing the time pupils spent at the terminals.

The CAI operated very successfully at Edmonton Catholic and at High Level. The procedures were less formal in these schools, which tended to produce a more favourable atmosphere; however, the machines were recent additions and perhaps the novelty had not yet worn off.

- Peer Support/Native Girls

Four percent of the START population was reported being served through support by peers (other students). At Assumption and Lethbridge, professionals from other agencies provided assistance

on a scheduled basis in training peers. At Hamilton School in Lethbridge, 10 native girls met regularly to receive and give support.

This intervention was difficult to implement successfully. Those in need of the support frequently had difficulty in expressing themselves and in relating to the supporters.

• Career Assistance

Over 100 of the START students were provided career education materials, counselling, field trips and career days. At Smoky Lake a conventional library of print, media, and computer resources was provided. Field trips and career days were identified with START and rounded out the aids to vocational decision making. Chart 2 indicates that a high success rating (5.0) was awarded to this set of endeavours. Considerable conventional wisdom exists in these areas as most school jurisdictions have had sophisticated career education resources and activities in place for several decades.

• Peer Help to Teachers (School-Wide Assistance Team, or SWAT)/Inservice to Teachers

These components were unique to Smoky Lake County projects and were the only ones which focussed on improving the knowledge and skills of regular class teachers in teaching and relating to high-risk pupils. Only developmental and pilot work were completed for SWAT. Inservice to teachers during professional days occurred mainly in Year 1 of the project but was ongoing at staff meetings.

• Mini Teaching Units

The 1993-94 report on individual projects lists the three dozen topics which made up the Mini Teaching Units at the Edmonton Catholic Fresh Start project. The topics were categorized into 18 Segments (for example, Native Culture, Environmental Issues), 9 Volunteer Activities (for example Toxic Roundup, Bissel Centre), and 9 Special Events (for example Christmas Dinner, Halloween Party).

• Computer Literacy/Extra-Curricular Activities

These components were described in the 1993-94 report on Clarence Sansom School. The school has used existing equipment and programs to broaden the program offering to START project members.

• Bulletin Board, Food Booth, and School Van

These three components were designated as START Project components by the Assumption School operated by Lakeland RCSS District. They illustrate the wide diversity of inputs and processes in place throughout the province and the influence of needs in shaping

interventions. A bulletin board was carefully maintained so as to impact a large number of students. Items related to START were featured. The food booth was started because some students came to school hungry. The van was leased since many did not have transportation to extra-curricular after school events. Self-ratings for success ranged from 3.5 to 4.9.

• Classroom Assistance for Teachers

This component was a Teacher Aide role in the project at Assumption School. When not in class, students requiring help were tutored by the Aide outside of the classroom. Much of the focus was providing help in Mathematics, followed by Language Arts, and Social Studies. The Classroom Aide service included support to teachers by way of clerical, photocopying, and marking tasks. This freed teachers to spend more time on instruction. In addition, the Assistant gave direct help to pupils during the lesson.

• Community Involvement

This component at a Lethbridge school was intended to establish connections between home, school, and the community. Students helped other members of the community by volunteering at a hospital, helping at a Special Needs Shopping Night, and at recycling projects, among others.

• Child Care Facility/Young Mothers Group

Some START Projects included a Child Care Facility among the components sharing their funds. This service was provided for project students who were "Teen Moms". In one facility a Child Care Worker, funded by START, was designated as a START component. The child care service had obvious advantages in holding pupils in school and providing a medium for instruction.

•Parent Support and Parenting Program

These were actually two components operating in the Watson school in Lethbridge. The Parent Support group focussed on helping parents deal with difficult teens, while the Parenting Program was more for imparting information to teen mothers, including procedures for contacting other support services.

<u>External Consultants' Comments on Interventions</u>

This section provides an opportunity to report on observations, conclusions, and judgments of the external consultants which apply to many or all of the project components listed above. The topics chosen deal with general relationships with students and regular class teachers and the need to improve remedial teaching.

• Individualizing the Human Touch: Relationships with Pupils

Common to all projects was a concern and respect for individual students AS INDIVIDUALS. Particularly noteworthy were the common courtesies routinely extended to START project members. They were recognized in the hallways with a "Good morning" or "Hi." There were systematic attempts in some projects to catch them being good and to provide social reinforcement on these occasions.

The foregoing is in contrast to the kind of recognition the typical START member had tended to experience over the years. The norm for many of them was to be recognized and spoken to usually only when something negative was to be communicated.

In several jurisdictions formal school assemblies included recognition for good citizenship, and improved performance or attendance. Strategies for "emphasizing the positive" were the topics at a professional teachers inservice and at staff meetings. The START project emphases, examples and reminders about relating to pupils were said to have had a ripple effect. Attitudes and behaviours of regular school staffs were altered. Participating schools likely have become more pupil centred and "pro-pupil" as a consequence of START project influences.

Only one project, in formalized, structured ways (via professional days for inservice) used Project START funds to assist teachers in accomplishing project goals; that is, application of reinforcement strategies in modifying student behaviours.

- Relationships with Regular School Staffs

For a project to achieve its potential a cooperating, understanding, and enthusiastic regular school staff seems necessary. An example is the tutoring component, a major intervention in six of the nine Alberta projects in this review and the one which overlaps most directly with the regular teachers' primary role. Communication, flexibility, organization, and attention to record keeping by those responsible for tutoring all facilitated the achievement of a cooperative partnership relationship with regular class teachers.

- Improving Tutoring and Remedial Teaching Skills

Lack of academic progress and low motivation for academic subjects were the most frequently reported criteria for selecting students as Project START members. It follows, then, that strengthening, diversifying, and modifying academic instruction should be a logical (and major) intervention component.

Projects responded to these major needs mainly by the addition of a tutoring intervention, frequently implemented in an individualized one-on-one procedure. Most tutoring was conducted by paraprofessionals, followed by students, and in one case by teachers.

Project planners did not respond to these needs by marked attention to remedial teaching. Except for the purchase of remedial materials for mathematics and language arts and, in three schools, the use of CAI courseware, improvement of remedial teaching as a project component was neglected. There was a dearth of planning, preservice and inservice to improve on tutoring and remedial teaching skills. It was blithely assumed that the student and paraprofessional tutors would and could attend to remediation needs. Relative to regular class teachers, apparently the same assumption prevailed. Secondary school teachers, compared to their elementary school counterparts, tend to find individualizing instruction and remedial teaching very difficult.

In spite of the deficiencies noted above about meeting remediation needs, the components selected by project planners — tutoring and classroom aide service — were universally praised by regular class teachers, students, their parents, and the external consultants. Two schools involved either teachers or students in study skills activities. These were also appreciated by participants.

- Final Postscript on Interventions

The external consultants observed that all projects were staffed with persons who exhibited commitment, concern, skill, and understanding, creativity, and adaptability to a marked degree. Success was noted in all of the three-year projects in securing the cooperation and involvement of most of the regular school staffs. Most important, their roles as student advocates, intermediaries between pupils and teachers, counsellors, and confidants had elevated them to positions of trust in the perceptions of their clients. Any successes noted in the next section are in large measure due to their efforts and influence. In the one instance where a project worker left in mid-year, without replacement, there was an almost immediate decline in attendance and an increase in dropping out of school.

Outcomes

Short-term outcome indicators used in this evaluation were percentage of school days attended, dropout rates, and gains in academic achievement and aspects of self-concept. The intermediate-term outcome indicator is the dropout rate of last year's (1992-93) project members.

Attendance

Table 4 displays the changes in percentage of school days attended for the START Project groups at the various schools and the provincial averages. The columns provide these data for each of the three years of the program's duration and the averages over that time span. The percentage change refers to the difference

between the average attendance for a particular year or interval and the level achieved in the respective baseline year (the year prior to joining the project).

Over the three years the overall provincial average percentage of attendance improved by 0.7 percent; however, over that time interval the trend for this indicator showed a decline in these improvements from +1.0 percent in Year 1 (1991-92), through +0.7

Table 4 - Changes in Percentage of Attendance Over Three Years

School or System	1991-92 Number* of Pupils	1991-92 Change** in %ge	1992-93 Number of Pupils	1992-93 Change in %ge	1993-94 Number of Pupils	1993-94 Change in %ge	1991-94 Number of Pupils	1991-94 Change in %ge
Smoky Lake	50	+1.8	56	-4.1	40	-1.3	146	-1.3
Lethbridge	147	-0.9	383	-0.7	365	+0.2	895	-0.4
High Level	28	+5.9	56	+9.5	46	+3.0	130	+6.4
Life Values	5	+5.5	13	+14.5	9	+4.7	27	+9.6
Parkland	85	-1.9	34	-1.2	-	-	119	-1.7
Edmonton	18	-2.5	12	+17.3	4	+7.8	34	+6.7
Shaughnessy	39	+6.0	48	0.0	34	-7.7	121	-0.2
Louise Dean	10	+4.6	11	+10.0	11	+36.8	32	+17.5
Clarence Sansom	-	-	-	-	9	-1.3	9	-1.3
Lakeland	21	+7.8	30	-0.7	39	-2.1	90	+0.6
TOTAL	403	+1.0	643	+0.7	557	+0.5	1603	+0.7

* Numbers exclude all students who transferred, dropped out, or for whom either baseline or current year's attendance was not reported.

** Changes in percentages of attendance are the differences between the current year's level and that of a baseline year. The latter is the attendance during the year immediately prior to joining the project.

percent for Year 2 (1992-93) and +0.5 percent in Year 3 (1993-94).

Individual projects which recorded trends which were declines in these respective years were as follows:

Shaughnessy: +6.0, 0.0, -7.7;
Lakeland: +7.8, -0.7, -2.1;

Two projects showed trends which were steady improvements for Years 1, 2, and 3. Respectively, they were:

Lethbridge: -0.9, -0.7, +0.2;
Louise Dean: +4.6, +10.0, +36.8

For High Level and Life Values the changes in attendance were all positive over all three years, but the percentages fluctuated. At Life Values the high was 17.6 percent (1991-92) and the low 3.0 percent in 1993-94. At High Level the high and low values were 9.5 percent and 3.0 percent.

Louise Dean recorded the highest average improvement for the three-year term of the program at +17.5 percent, followed by Life Values (+9.6%) and Edmonton (+6.7%). The rank order for the remainder which showed improvements in attendance was High Level (+6.4%) and Lakeland (+0.6%). It must be noted, however, that attendance data were available for very few of the students in the Edmonton Catholic project. Net declines occurred at Parkland (-1.7%), Smoky Lake (-1.3%), Clarence Sansom (-1.3%), Lethbridge (-0.4%), and Shaughnessy (-0.2%). At Lethbridge this was attributable to losses in Years 1 and 2 while at Shaughnessy the loss occurred in Year 3. For Clarence Sansom there were data for one year, only.

Dropouts

The rates at which START Project members left school in the various projects examined in this evaluation are recorded in Table 5. Unemployment figures were added to reflect a bias shared by the external consultants; namely, that dropouts who leave to assume employment ought to be differentiated from those who are unemployed because teenagers who leave school and have no job are in a much more precarious situation than those who have a job. The table displays the school leaving rates for each of the three years of the program duration as well as the overall three-year averages. The latter statistics are listed in the right-hand column in Table 5. The average dropout rate over three years for the eight projects listed is 7.5 percent and for those unemployed it is 6.4 percent. Only about one person in seven who left school was reported as employed. The three-year average dropout rates vary widely, ranging from 33.8 percent for Life Values (24.7% unemployed) and 25 percent for Louise Dean to 2.7 percent (2.1% unemployed) at Lethbridge. In rank order, from highest to lowest (with dropouts unemployed shown in parentheses) the listing is as follows:

Life Values (24.7%);
Louise Dean (15.6%);
Edmonton (4.9);
Shaughnessy (5.2%);
Assumption (Lakeland) (7.8%);
High Level (6.6%);
Smoky Lake (3.3%);
Lethbridge (0.7%);
Clarence Sansom (0.0%)

Table 5 - Dropouts From START Projects and Numbers Unemployed or Not Traceable

School or System		1991-92 N	1991-92 %	1992-93 N	1992-93 %	1993-94 N	1993-94 %	1991-94 N	1991-94 %
Smoky Lake	Dropouts	-	-	8	11.8	2	3.8	10	5.6
	Unemployed	-	-	5	7.4	1	1.9	6	3.3
	Not traceable	-	-	1	1.5	-	-	1	0.6
	Baseline N	60		68		52		180	
Lethbridge	Dropouts	11	6.0	15	3.1	5	1.1	31	2.7
	Unemployed	5	2.7	2	0.4	1	0.2	8	0.7
	Not traceable	6	3.3	6	1.3	4	0.9	16	1.4
	Baseline N	183		478		438		1099	
High Level	Dropouts	2	3.1	9	11.3	4	7.5	15	7.6
	Unemployed	2	3.1	8	10.0	3	5.7	13	6.6
	Not traceable	-	-	1	1.3	-	-	1	0.5
	Baseline N	65		80		53		198	
Life Values	Dropouts	4	14.8	11	37.9	11	52.4	26	33.8
	Unemployed	3	11.1	7	24.1	9	42.9	19	24.7
	Not traceable	1	3.7	3	10.3	2	9.5	6	7.8
	Baseline N	27		29		21		77	
Edmonton	Dropouts	2	9.1	3	10.0	7	24.1	12	14.8
	Unemployed	1	4.6	-	-	3	10.3	4	4.9
	Not traceable	-	-	3	10.0	3	10.3	6	7.4
	Baseline N	22		30		29		81	
Shaughnessy	Dropouts	9	11.7	3	6.0	10	15.4	22	12.6
	Unemployed	2	2.6	-	-	8	12.3	10	5.2
	Not traceable	5	6.5	-	-	1	1.5	6	3.1
	Baseline N	77		50		65		192	
Louise Dean	Dropouts	4	40.0	1	9.1	3	27.3	8	25.0
	Unemployed	1	10.0	1	9.1	3	27.3	5	15.6
	Not traceable	3	30.0	-	-	-	-	3	9.4
	Baseline N	10		11		11		32	
Clarence Sansom	Dropouts	-	-	-	-	-	-	-	-
	Unemployed	-	-	-	-	-	-	-	-
	Not traceable	-	-	-	-	-	-	-	-
	Baseline N	12		13		13		38	
Lakeland	Dropouts	5	12.5	9	16.4	5	8.5	19	12.3
	Unemployed	5	12.5	4	7.3	3	5.1	12	7.8
	Not traceable	-	-	3	5.5	1	1.7	4	2.6
	Baseline N	40		55		59		154	
TOTAL	Dropouts	**37**	**7.5**	**59**	**7.2**	**47**	**6.3**	**143**	**7.0**
	Unemployed	**19**	**3.8**	**27**	**3.3**	**31**	**4.2**	**77**	**3.8**
	Not traceable	**15**	**3.0**	**17**	**2.1**	**11**	**1.5**	**43**	**2.1**
	Baseline N	**496**		**814**		**741**		**2,051**	
Dropouts employed		3	0.6	15	1.8	5	0.7	23	1.1

The only trends discernable were at Lethbridge and Edmonton Catholic. At Lethbridge the unemployed rate (Table 5) declined steadily from 2.7 percent in 1991-92 to 0.4 percent and 0.2 percent in the years following. At Edmonton Catholic the rate increased from 4.6 percent to 10.3 percent. Provincially, the average rate was rather steady at 3.8 percent, 3.3 percent and 4.2 percent, respectively, for years 1, 2, and 3.

Between years within projects the unemployed dropout rate fluctuated widely; for example, at Smoky Lake the rate went from zero percent in Year 1 to 7.4 percent in Year 2; at Life Values from 11.1 percent in Year 1 to 42.9 percent in Year 3; and at Shaughnessy from zero in Year 2 to 12.3 percent in Year 3.

The most appropriate comparison groups were the ones selected at Shaughnessy School during 1991-92 (Year 1) and 1992-93 (Year 2). (The one for the final year was selected so late that extreme biases were created with respect to attendance and dropout rates.) Table 6 displays the sharp differences in school leaving rates for the Project and Comparison groups at Shaughnessy for Years 1 and 2.

Table 6 - Dropout Rates for START and Comparison Students at Shaughnessy

Group	Number of Students	Years	Quit School Employed N	Employed %	Unemployed* N	Unemployed* %	Total** N	Total** %
START	77	1991-92	2	2.6	6	7.8	8	10.4
	50	1992-93	3	6.0	0	0	3	6.0
Total START	127	1991-93	5	3.9	6	4.7	11	8.7
Comparison	72	1991-92	0	0	23	32.0	23	32.0
	62	1992-93	2	3.2	17	27.4	19	30.6
Total Comparison	134	1991-93	2	1.5	40	29.9	42	31.3

* Students reported as "Unemployment status unknown" were placed in the "Unemployed" category.
** The total does not include students reported to be in jail. They were classified as transferees not dropouts.

The proportions that left school and were unemployed were 4.7 percent from the START Project group and 29.9 percent from its Comparison group counterpart. When those leaving school and securing employment were added the two-year grand total averages were 8.7 percent for the START group members and 31.3 percent for those used for comparison purposes.

Follow-Up of Previous Year's START Students

Table 7 categorizes the May 31, 1994 status of students reported for the previous year's START Project groups. Provincially, a total of 75 (8.9%) of the 1992-93 class were reported to have left school. Twenty members (2.3%) were employed and 55 (6.4%) were unemployed. The project staffs reported 266 (30.7%) continuing as

START participants during 1993-94. Those in regular school numbered 154 (17.8%). Finally, 388 (44.8%) transferred or could not be traced for a follow-up.

In rank order from high to low, dropouts from school for last year's START members were reported as follows:

Life Values (14, or 48.3%);
Lakeland (13, or 23.6%);
High Level (13, or 16.3%);
Shaughnessy (8, or 16.0%)
Edmonton Catholic (5, or 6.1%);
Smoky Lake (4, or 5.9%);
Lethbridge (18, or 3.7%).

Table 7 - Follow-Up of 1992-93 START Students

School	Continued in START		In Regular School		Quit School Employed		Quit School Unemployed		Transferred or Follow-up Not Possible		Total Number of Pupils
	N	%	N	%	N	%	N	%	N	%	N
Shaughnessy	29	58.4	7	14.0	2	4.0	6	12.0	6	12.0	50
Clarence Sansom	5	38.5	-	-	-	-	-	-	8	61.5	13
Louise Dean	-	-	-	-	-	-	-	-	11	100	11
Lethbridge	141	29.5	86	18.0	4	0.8	14	2.9	252	52.7	478*
High Level	23	28.8	24	30.0	1	1.3	12	15.0	20	25.0	80
Lakeland	14	25.5	-	-	7	12.7	6	10.9	28	51.0	55
Life Values	7	24.1	-	-	2	6.9	12	41.4	8	27.6	29
Smoky Lake	42	61.8	2	2.9	-	-	4	5.9	18	26.5	68**
Edmonton	5	6.1	35	42.7	4	4.9	1	1.2	37	45.1	82***
TOTAL	266	30.7	154	17.8	20	2.3	55	6.4	388	47.8	866****

* The total of this row is 497. One school reported on an extra 19 students who were late additions to START in 1993 but not listed as participants in 1992-93. Row percentages were based on 478 students.
** Two students who graduated are not included in any of the other columns.
*** The follow-up was done on the full Fresh Start group, not on the 29 START students only.
**** This is the column total. The row total is 883.

Table 5 also ranks Life Values highest for dropouts DURING the 1992-93 year, when the students reported above were still in school. The dropouts at Shaughnessy, however, were very low (3, or 6.0% in Table 5), indicating that most left school during 1993-94.

Academic Achievement

Table 8 displays the annual rates of progress in achievement over baseline (pre-project) levels. The overall improvements in rates

of academic progress as measured by the standardized tests were 0.78 grade equivalents per year in Mathematics and 0.65 for Reading. Overall, the highest average annual improvements in gains were in Year 2 (1992-93) in Mathematics and in Reading. Greatest improvements occurred at Clarence Sansom. At High Level the main thrusts were directed at Mathematics and Reading, and substantial gains were recorded. Lowest improvements were at Life Values in Mathematics and at Shaughnessy in Reading; however, gains in Mathematics increased substantially at Life Values during Year 3.

Table 8 - Three-Year Rates of Academic Progress Determined by Standardized Tests

		Amount Over Expectation* Expressed in Grade Equivalents							
		1991-92		1992-93		1993-94		1991-94	
School	Subject	N	Gain***	N	Gain	N	Gain	N	Gain
Shaughnessy	Mathematics*	56	0.91	47	0.57	46	0.19	149	0.58
Clarence Sansom	Mathematics	-	-	13	2.70	13	0.80	26	1.75
High Level	Mathematics	26**	1.22	45	1.14	20	1.09	91	1.15
Life Values	Mathematics	16	0.08	14	-0.30	9	0.64	39	0.07
TOTAL	**Mathematics**	**98**	**0.86**	**77**	**0.92**	**50**	**0.53**	**305**	**0.78**
Shaughnessy	Reading*	52	0.41	40	0.32	40	0.11	132	0.29
Clarence Sansom	Reading	-	-	13	1.90	13	0.90	26	1.40
High Level	Reading	26**	1.25	40	0.70	27	0.42	93	0.77
Life Values	Reading	16	1.08	14	1.18	9	0.89	39	1.07
TOTAL	**Reading**	**94**	**0.76**	**107**	**0.77**	**89**	**0.40**	**290**	**0.65**

* Expectation = Baseline grade equibalent + years in school on entry to Project
** Annual rate, calculated from gain over a shorter period.
*** Rate of increase for the year minus the baseline rate
Notes: Shaughnessy used the computer assisted instruction tests included with the software.
Clarence Sansom used the Kaufman Test of Educational Development.
High Level used the Stanford Diagnostic Test of Reading in Mathematics.
Life Values used the Peabody Individual Achievement Test.

Self Esteem

One of the goals of each of the START Projects was to raise the self-esteem of the students, because it was assumed that this variable was linked to achievement and to staying in school. The Culture Free Self Esteem Inventory (CFSEI) Form A (for Junior High School students) and Form AD (for High School Students) were used to monitor changes for this variable.

Form A of the CFSEI has 60 items, each being a statement to which the student responds "Yes" or "No" to indicate whether it describes him or her. The inventory yields a total score and 5 subscores:

General Self-Esteem (20 items)
Sample item - I am happy most of the time.

Social, or Peer Related self-esteem (10 items)
Sample item - I have only a few friends.

Academic, or School Related self-esteem (10 items)
Sample item - I often feel like quitting school.

Parental, or home-related self-esteem (10 items)
Sample item - I have lots of fun with both of my parents.

Lie, or defensiveness scale (10 items)
Sample item - I am never shy.

Form AD has 40 items and produces 4 subscores along with the total. General Self-Esteem, Social Self-Esteem, and the Lie scales are similar to those in Form A; however, there is a Personal scale which ". . . refers to individuals' most intimate perceptions of self worth" (Battle, 1992, p.4). A sample item is: "Are you as nice looking as most people?"

The procedure was to administer the instruments early in the 1993-94 school year and again in late March or early April. Clarence Sansom School was excused from administering the instrument because it was deemed inappropriate for the START students in that school. At Vilna School the form was not administered because of lack of time needed to administer the test to all of the students in both junior and senior high school. The policy was not to identify the START students in any way, such as interventions or testing limited to that group. Analysis was carried out ONLY for students who had taken the same form of the test in both fall and spring.

The matter of primary interest was the extent to which students in each project changed, with respect to Self Esteem between the fall and spring administrations. Also of interest was how the scores compared to figures based on the norming group. For each scale the median and the means have been calculated from the tables presented by Battle (1992). Each median was arrived at by interpolations based on percentile ranks, and the means were taken as the raw scores corresponding to T-scores of 50. This was considered appropriate because the T-scores seemed to based on linear calculations from the z-scores, rather than being normalized.

For all of the scales a high score is more desirable than a low score; that is, higher scores indicate higher self-esteem. For the Lie score, also, a high score indicates a lower tendency to lie, which in this test was an apparent effort to enhance one's image by entering a more socially desirable response. The score labelled "Total" in both Form A and Form AD is the sum of the other scales, excluding the Lie scale.

Observations, based on an inspection of Table 9 and 10, were,

Table 9 - Results of CFSEI Form A by School

School	Variable	CFSEI Scale Total	General	Social	Academic	Parental	Lie
Assumption (Lakeland) N = 16	Fall Mean	33.44	14.69	7.44	4.38	6.94	6.38
	Spring Mean	32.56	14.44	7.06	4.63	6.44	6.38
	Difference	-0.88	-0.25	-0.38	0.25	-0.50	0
	Fall/Spring Correl.	0.81	0.86	0.80	0.19	0.67	0.72
	Fall Standard Dev.	7.68	4.47	1.97	2.13	1.88	2.58
	Spring Standard Dev.	7.97	3.97	1.80	1.89	2.58	1.86
	Significance	NS	NS	NS	NS	NS	NS
Life Values (St. Paul) N = 6	Fall Mean	34.83	14.83	6.67	6.17	7.17	4.67
	Spring Mean	36.83	15.67	7.17	6.67	7.33	4.83
	Difference	+2.00	+0.84	+0.50	+0.50	+0.16	+0.16
	Fall/Spring Correl.	0.34	0.47	0.56	0.71	0.19	0.18
	Fall Standard Dev.	11.13	5.04	2.25	2.79	2.99	2.25
	Means Difference	7.55	3.39	1.47	2.88	2.58	1.33
	Significance	NS	NS	NS	NS	NS	NS
High Level N = 32	Fall Mean	30.03	12.72	5.78	4.91	6.63	6.94
	Spring Mean	32.19	13.28	6.66	5.69	6.56	7.16
	Difference	+2.16	+0.56	+0.88	+0.78	-0.07	+0.22
	Fall/Spring Correl.	0.56	0.65	0.72	0.73	0.51	0.56
	Fall Standard Dev.	6.08	3.01	2.52	2.22	2.24	2.17
	Spring Standard Dev.	5.65	3.11	2.42	2.32	2.09	2.26
	Significance	<.05	NS	<.05	<.01	NS	NS
Hamilton (Lethbridge) N = 40	Fall Mean	33.52	14.78	6.83	5.25	6.68	7.75
	Spring Mean	33.55	14.28	6.93	5.35	7.00	7.35
	Difference	+0.03	-0.50	+0.10	+0.10	+0.32	-0.40
	Fall/Spring Correl.	0.49	0.55	0.60	0.44	0.58	0.64
	Fall Standard Dev.	7.40	3.53	2.40	2.57	2.39	1.50
	Spring Standard Dev.	8.57	3.92	2.34	2.70	2.41	2.16
	Significance	NS	NS	NS	NS	NS	NS
Watson (Lethbridge) N = 23	Fall Mean	30.96	12.04	6.39	5.87	6.65	6.91
	Spring Mean	31.96	13.09	6.39	6.09	6.39	6.35
	Difference	+1.00	+1.05	0	+0.22	-0.26	-0.56
	Fall/Spring Correl.	0.68	0.67	0.69	0.51	0.53	0.69
	Fall Standard Dev.	7.28	2.39	2.23	2.22	2.12	2.39
	Spring Standard Dev.	7.89	2.10	2.39	2.13	2.66	2.10
	Significance	NS	NS	NS	NS	NS	NS
Wilson (Lethbridge) N = 40	Fall Mean	31.03	13.40	6.80	4.70	6.13	7.38
	Spring Mean	31.40	13.78	7.05	4.80	5.78	6.90
	Difference	+0.37	+0.38	+0.25	+0.10	-0.35	-0.48
	Fall/Spring Correl.	0.72	0.66	0.64	0.66	0.76	0.66
	Fall Standard Dev.	8.59	3.20	1.74	2.71	3.32	2.15
	Spring Standard Dev.	8.31	3.58	2.20	2.71	2.99	2.22
	Significance	NS	NS	NS	NS	NS	NS
Norms for Form A*	Median	39.83	16.81	7.82	7.31	8.52	8.48
	Mean	38.00	16.00	7.25	7.00	7.53	8.00

* Interpolated from figures provided in norms tables (Battle, 1992).

Table 10 - Results of CFSEI Form AD by School

School	Variable	CFSEI Scale Total	General	Social	Personal	Lie
Louise Dean (Calgary) N = 9	Fall Mean	14.67	7.56	4.22	2.89	6.33
	Spring Mean	25.89	13.33	7.00	5.56	5.22
	Difference	+11.22	+5.77	+2.78	+2.67	-1.11
	Fall/Spring Correl.	- 0.14	0.16	-0.42	-0.06	0.62
	Fall Standard Dev.	6.25	7.56	2.11	2.15	1.32
	Spring Standard Dev.	5.26	13.33	1.12	2.46	1.72
	Significance	<.01	<.01	<.02	<.05	<.05
Assumption (Lakelandl) N = 11	Fall Mean	25.28	12.27	7.27	5.73	5.73
	Spring Mean	25.09	12.00	7.36	5.73	6.18
	Difference	-0.19	-0.27	+0.09	0	+0.45
	Fall/Spring Correl.	0.72	0.63	-0.01	0.87	0.59
	Fall Standard Dev.	5.42	2.87	1.01	2.15	1.62
	Spring Standard Dev.	5.38	2.90	1.20	2.15	2.14
	Significance	NS	NS	NS	NS	NS
Edmonton N = 14	Fall Mean	21.57	10.71	7.07	3.79	6.64
	Spring Mean	22.36	11.00	6.86	4.50	6.14
	Difference	+0.79	+0.29	-0.21	+0.71	-0.50
	Fall/Spring Correl.	0.66	0.62	0.81	0.52	0.23
	Fall Standard Dev.	6.69	3.83	1.07	2.61	1.28
	Spring Standard Dev.	6.70	4.24	1.17	2.28	1.51
	Significance	NS	NS	NS	NS	NS
Smoky Lake (Except Vilna) N = 10	Fall Mean	19.60	10.10	5.90	4.30	5.50
	Spring Mean	25.20	12.50	7.10	5.60	5.10
	Difference	+5.60	+2.40	+1.20	+1.30	-0.40
	Fall/Spring Correl.	-0.02	0.02	-0.27	0.43	0.39
	Fall Standard Dev.	5.76	2.38	2.03	1.57	1.65
	Spring Standard Dev.	2.20	1.35	1.20	1.51	1.29
	Significance	<.05	<.05	NS	<.05	NS
Shaughnessy (Calgary) N = 23	Fall Mean	20.04	10.04	5.83	4.17	6.09
	Spring Mean	23.74	12.04	6.74	4.96	6.04
	Difference	+3.70	+2.00	+0.91	+0.79	-0.05
	Fall/Spring Correl.	0.78	0.76	0.66	0.70	0.48
	Fall Standard Dev.	6.70	3.27	2.29	2.59	1.38
	Spring Standard Dev.	6.02	3.18	1.69	2.27	1.49
	Significance	<.001	<.001	<.05	NS	NS
Paterson (Lethbridge) N = 64	Fall Mean	20.33	9.97	5.83	4.53	6.27
	Spring Mean	22.45	11.28	6.23	4.94	6.03
	Difference	+2.12	+1.31	+0.40	+0.41	-0.24
	Fall/Spring Correl.	0.80	0.72	0.79	0.73	0.52
	Fall Standard Dev.	7.14	3.55	2.06	2.37	1.29
	Spring Standard Dev.	7.05	3.38	201	2.53	1.65
	Significance	<.001	<.001	<.05	NS	NS
Norms for Form AD*	Median, for Adults	25.00	12.88	6.95	5.00	5.77
	Mean, for Adults	23.00	11.67	6.57	4.75	5.57**

* Interpolated from figures provided in norms tables (Battle, 1991).
** This mean is based on a group of 507 High School students.

first, that most of the gains were not statistically significant, and second, that only a few were in the negative direction (18 out of 66, or 27.3%). Outside of some scattered minus changes, the biggest group occurred for the Assumption (Lakeland) students. It was also noted that the Lie scale claimed some negative changes (7 out of a total of 12), but that only one was statistically significant.

The only significant differences between fall and spring means for Form A occurred in the High Level START group for the Total, Social, and Academic self esteem scores. For Form AD all of the changes in the Louise Dean group were statistically significant, including the negative change in the Lie scale. Other significant changes (all in the positive direction) occurred in the Smoky Lake, Shaughnessy, and Paterson groups.

With respect to the Standard Deviations, they were rather stable from fall to spring, with one notable exception — Smoky Lake, where the spring value was less than half of that for the fall. The change was most likely a result of some people with low self esteem scores shifting closer to the mean.

Table 11 - Results of CFSEI Form A by Sex

Group	Variable	CFSEI Scale					
		Total	General	Social	Academic	Parental	Lie
Males N = 95	Fall Mean	32.43	13.85	6.62	5.22	6.74	7.05
	Spring Mean	32.65	14.01	6.66	5.38	6.60	6.88
	Difference	+0.22	+0.16	+0.04	0.25	-0.14	-0.17
	Fall/Spring Correl.	0.61	0.62	0.66	0.46	0.63	0.59
	Fall Standard Dev.	7.22	3.57	2.27	2.38	2.38	2.18
	Spring Standard Dev.	7.86	3.77	2.16	2.49	2.49	2.17
	Significance	NS	NS	NS	NS	NS	NS
Females N = 64	Fall Mean	31.08	13.28	6.63	4.88	6.30	7.23
	Spring Mean	32.52	13.67	7.13	5.42	6.30	6.84
	Difference	+1.44	+0.39	+0.50	+0.67	0	-0.39
	Fall/Spring Correl.	0.65	0.71	0.66	0.67	0.61	0.71
	Fall Standard Dev.	8.23	3.60	2.16	2.81	2.76	2.14
	Spring Standard Dev.	7.61	3.41	2.29	2.89	2.70	2.19
	Significance	NS	NS	<.05	NS	NS	NS
Norms	Mean for Males	38.50	16.33	7.25	7.00	8.00	8.00
	Mean for Females	39.33	15.50	7.25	7.00	7.50	8.17

Table 11 and Table 12 show results of the CFSEI Form A and Form AD, respectively, by sex. Means from the norms tables are also shown.

For Form A there was only one change that was statistically significant, and that was in the Social scale for females. For Form AD all of the changes for the females were statistically significant (for the Lie scale the shift was negative), and for the

males significant increases occurred for the Total, General, and Social scales. While all of the means were below the norms for the various groups who took Form A, the reverse was true for those who completed Form AD, with the exception of the Lie scale.

Table 12 - Results of CFSEI Form AD by Sex

Group	Variable	CFSEI Scale Total	General	Social	Personal	Lie
Males N = 73	Fall Mean	21.82	10.56	6.25	5.01	5.85
	Spring Mean	23.86	11.86	6.66	5.34	5.77
	Difference	+2.04	+1.30	+0.41	+0.33	-0.08
	Fall/Spring Correl.	0.76	0.69	0.67	0.67	0.53
	Fall Standard Dev.	6.72	3.42	6.25	5.01	1.34
	Spring Standard Dev.	6.31	3.14	6.66	5.34	1.58
	Significance	<.001	<.001	<.05	NS	NS
Females N = 58	Fall Mean	18.57	9.52	5.64	3.53	6.59
	Spring Mean	22.67	11.45	6.53	4.69	6.14
	Difference	+4.10	+1.93	+0.89	+1.16	-0.45
	Fall/Spring Correl.	0.51	0.49	0.49	0.57	0.42
	Fall Standard Dev.	6.85	3.45	2.08	2.36	1.30
	Spring Standard Dev.	6.42	3.89	1.78	2.42	1.70
	Significance	<.001	<.001	<.001	<.001	<.05
Norms	Mean for Males	23.50	12.00	6.57	5.00	6.20
	Mean for Females	23.00	11.67	6.67	4.73	6.00

The CFSEI test data are consistent with the conclusion that the START program had a generally positive effect on self esteem of the students, especially at the high school level (as revealed in Form AD test results). In the junior high school grades the effect was weak, and mixed (as Form A results show). The overall trend was for self esteem scores to improve; however, this was not true for Assumption school pupils. For Form A most of the changes were negative (but not statistically significant), and for Form AD, where many of the schools showed real gains, Assumption's changes were not significant, and actually tended to be negative. The results broken down by sex gave a stronger indication of the overall results. For Form A the trend was very mildly positive, and for Form AD the general pattern was one of strong, statistically significant gains.

External Consultants' Comments About Outcomes

Comments and conclusions are organized according to the outcome indicators chosen for the evaluation; namely, percentage of attendance, attitudes toward school (Year 2), dropout rates, academic achievement, and self-concept levels. An additional section addresses the problem of establishing cause-effect linkages (relating interventions to outcomes) and suggests a solution.

• Attendance

Overall average percentages of attendance each year of the project showed as improvements over those of the respective baseline years. Provincially, the three-year increases averaged 0.8 percent. Projects which consistently showed large improvements had very low baseline levels as referents and, in two instances, applied substantial resources to improving school attendance; that is, the daycare facility and its services at Louise Dean and the personal contacts by home visitors at Life Values. Discontinuation of monitoring and counselling about attendance had a marked effect at two schools during Year 3; the midyear departure of the Social Worker at Shaughnessy School, and the cessation of close monitoring and follow-up at the Assumption School in the Lakeland RCSS District.

The conclusion is that, when sufficient attention is directed at this aspect of pupil behaviour, attendance levels can be maintained and improved. However, other project services and supports, without the monitoring and follow-up components about attendance appeared to have only modest impact.

• Attitudes Toward School

For the 1992-93 evaluation by Nyberg & Rhodes (1993), the School Subjects Attitude Scales (SSAS) was administered in fall and in spring. The purpose was to measure changes in three aspects of attitude toward school. The factors measured were as follows:

Evaluation - how much school is liked;
Usefulness - how valuable it is to a pupil;
Difficulty - how easy or hard it is for a pupil.

For all three factors a statistically significant positive change was obtained. This occurred in spite of the fact that the Alberta norms for the SSAS (Nyberg & Clarke, 1983) showed a decline from fall to spring.

The conclusion was that the START Project had improved students' attitudes toward school.

• Dropouts

Dropout rates declined in Year 3 (6.3%, Table 5) compared to rates in Year 1 and 2 (7.5% and 7.2%, respectively). The overall average rates for those who left school and were unemployed progressively declined over the three years from 7.5 percent to 5.8 percent.

The only appropriate and sufficiently large Comparison Group was selected for use at Shaughnessy School during Year 1 and 2. Table 6 records large differences between the school leaving rate for the Comparison Group (31.3%) and the START Project Group (8.7%).These

data support the conclusion that Project START reduced the overall dropout rate for the set of schools in the group reviewed.

When faced, however, with making judgments about the relative success of individual projects in reducing dropout rate, obstacles are encountered. Comparisons between and among projects present difficulties. The major reason for this is that the entry levels and background characteristics of the START members can vary greatly, according to project. As a consequence, the probability of them dropping out during the project year or the year following varies considerably. Age is also a relevant variable, since older teens are more likely to drop out than those of typical junior high school age.

The external consultants ranked the projects in order of degree of school-leaving risk to illustrate differences.

First - Life Values
- i) over one-third were of legal school-leaving age (16)
- ii) selection reasons reported in Year 1: behaviour disorder (89.7%), chronic absence (86.2%), drug or alcohol abuse (79.3%), lack of academic progress (72.4%), and unstable living situation (51.7%).

Second - Edmonton Catholic
- i) nearly all were 16 years of age or older
- ii) all had dropped out or elected not to attend regular school

Third - Louise Dean
- i) all were non-attenders or couldn't attend due to pregnancy
- ii) all were 16+ years old in Year 3

Fourth - Shaughnessy
- i) increasing proportion of 16+ years old due to phasing out of junior high grades
- ii) all were highest risk in a very high risk IOP population (bottom 5% of the general school population)

Fifth - Lakeland (Assumption School)
- i) fair proportion were 16+ years old
- ii) history of dropping out in the attendance area communities, and frequent out-of-school problems

Sixth - Smoky Lake
- i) fair proportion were 16+ years old
- ii) one school with a high mobility rate for families

Seventh - High Level
- i) very high mobility among families in the area; however, nearly all were below legal school leaving age

Eighth - Clarence Sansom

i) potentially very high risk in the future, and definitely so when they leave this school and enter high school
ii) fortunate, at this time, since they are in an excellent pupil-centred community school

Ninth - Lethbridge

i) almost all of the 16+ pupils are at the Watson IOP school
ii) like Shaughnessy, Watson has a homogeneous population with a high risk propensity (all of the dropouts from Year 3 attended there)
iii) the other schools enroll the upper 95 percent of the population at Grade 8 and 9
iv) the District has a very broadly based safety net in the form of a variety of special needs personnel and programs

The external consultants conclude that all projects were able to reduce dropouts significantly. For those ranked in the top three on the list above, they assumed a large proportion (over one-half) would simply not be in school without acceptance at Life Values, Edmonton Catholic, and Louise Dean. For over one-half of the students these are truly schools of last resort. For the middle-ranked projects at Shaughnessy, Assumption, and Smoky Lake, a single high dropout year increased significantly their three-year average (Table 5). (Smoky Lake identified START students late in Year 1, and this was reflected in the zero dropout rate for that year.)

At both Shaughnessy and Lakeland the high dropout anomalies in a single year can be accounted for by unusual factors (described in the complete report). Finally, High Level, Clarence Sansom, and Lethbridge also did well even though their risk level was judged to be relatively low. Each project helped to keep teens in school.

- Follow-Up on 1992-93 START Students

The intermediate term outcome indicator was the dropout rate of the previous year's START population surveyed and reported a year later. For the middle year group (1992-93) the dropout total increased about 1.5 percent when the status review was conducted a year later. At 7.4 percent (Table 7) the new total was not as alarming as some of the extreme percentages posted for individual projects. The dropout proportion leader was Life Values, at 48.3 percent (Table 7); however, the consultants were convinced the figure would have been close to 100 percent without the special services at the school. Shaughnessy and Lakeland were ranked next at over 16 percent. This was in accord with the expectations noted above. The general average of 7.4 percent was depressed by the heavy weight exerted by Lethbridge which registered nearly sixty percent of the pupil count. Lethbridge reported only 3.7 percent dropouts for the 1992-93 class. Edmonton Catholic was extremely successful in this outcome area.

• Academic Achievement

In the four schools which measured academic achievement as a project evaluation contribution, all documented some improvement in Mathematics and Reading which could be attributed to the project. The improvements in rates of progress were in direct proportion to the resources applied in direct teaching, remediating, and tutoring in these two basic skills areas. The leaders in magnitude of improvement achieved were High Level and Clarence Sansom. At High Level all of the resources were applied to special remedial "pull out" resource rooms staffed by professional teachers. At Clarence Sansom most of the project money was used to fund paraprofessional tutors who worked mainly in helping with classroom learning and after-class tutoring. The CAI at Shaughnessy used about two-thirds of the funds allotted and a lower proportion was expended for this purpose at Life Values.

These data suggest that a concerted focus on remedial instruction, best exemplified by the resource room instruction at High Level, best meets the academic deficits common to most START students. Another conclusion is that a focussed application of resources (once again best illustrated at High Level with its narrow focus on remediation) is more likely to achieve the desired objective.

The need for more and improved remediation in the basic skills subjects was noted in the Interventions section of this report. The outcome data presented and the arguments communicated above provide additional justification for this judgment. The comments by Haycock (1993) on the primacy of high quality and focussed academic instruction for high-risk pupils are instructive.

• Self Concept

Use of Form AD of the Culture Free Self Esteem Inventory (CFSEI) in 1993-94 changed the picture painted in 1993 of the success of START interventions on the self esteem of the pupils. Form AD of the instrument seems to be a more appropriate measure of self esteem than Form A for START pupils. Some of the teachers had remarked that the students sometimes made light of some of the items based on their own perceived maturity. Some teachers mitigated the problem by sharing a chuckle with the students, then telling them that they knew what the problem items were getting at and to respond accordingly. The fact remains, however, that Form AD was a sharper measure which resulted in the identification of more statistically significant changes than Form A.

In view of all of the evidence, it appeared that START students, overall, did improve with respect to self-esteem.

• Establishing Cause-Effect Linkages

Elsewhere in the report evasive comments appear that certain

results are equivocal or that a gain or improvement cannot be attributed to a particular intervention with certainty. Qualifying terms such as "it seems that" or "it is likely" were used because of lack of certainty about the effects of project components. A controlled experimental design in several centres would circumvent such problems and shed some light on cause-effect linkages (that is, WHICH interventions produced WHICH results).

It is recommended that an experiment be considered for implementation at the Shaughnessy School. The project in this school has had its funding extended and happens to be large enough to accommodate the design suggested below. Also, it operates with only two major, easily defined independent variables (interventions); namely, the Social Worker service, and the CAI Programs. Pupils at Shaughnessy would be randomly assigned to one of four groups: Social Worker only, CAI only, Social Worker plus CAI (the START Project arrangement) and Control (no special service). About 40 students are needed in each group. Outcome pre-post-test measures could include Form AD of CFSEI, SSAS, Stanford Diagnostic Tests, the CAI tests, dropouts, and attendance.

The findings would establish impacts attributable to each of the interventions separately as well as the effects of the two in combination. There would need to be close monitoring to ensure that the CAI program was carried out as intended and that sufficient time was allotted for it for each student.

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APPENDIX 1

REPORT FORMS

Background and Attendance of Students School or Jurisdiction _____

Date Submitted _____ START: new ___ START: continuing ___

List of Students	Age on Sept. 1, 1993	Reached age 16 during 1993-94 (✓)	Grade on Sept. 1, 1993	% of days attended in baseline year*	% of days attended in 1993-94**	Change in % attendance	Dropped out/ Transferred in 1993-94
Column no.	1	2	3	4	5	6	7	8

* Baseline year for NEW students is 1992-93, for CONTINUING students it is 1990-91 or 1991-92.

** Report attendance for those who completed the school year, and leave blank for students who dropped out.

Please use separate sheets for New and Continuing students

Background and Attendance of Students School or Jurisdiction _____

Date Submitted _____ Comparison: new ___ Comparison: continuing ___

List of Students	Age on Sept. 1, 1993	Reached age 16 during 1993-94 (✓)	Grade on Sept. 1, 1993	% of days attended in baseline year*	% of days attended in 1993-94**	Change in % attendance	Dropped out/ Transferred in 1993-94
Column no. 1	2	3	4	5	6	7	8

* Baseline year for NEW students is 1992-93, for CONTINUING students it is 1990-91 or 1991-92.

** Report attendance for those who completed the school year, and leave blank for students who dropped out.

Please use separate sheets for New and Continuing students.

INTERVENTIONS

Staff Report on START Components for '93-'94, Page __

School or Jurisdiction _____

Name of component: _____

_____

Overall success rating (1 is low, 5 is high) 1 2 3 4 5 N/A

Number of pupils served through this component _____

BRIEF DESCRIPTION OF THIS COMPONENT

_____

_____

_____

_____

_____

COMMENTS ABOUT THIS COMPONENT (e.g. strengths, weaknesses, changes needed, future plans, others besides students served)

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____ (Attach another sheet if necessary)

WHEN DID THIS COMPONENT BEGIN IN YOUR SCHOOL _____

Form completed by _____ Telephone: _____

Report on Dropouts and Transfers School or Jurisdiction _____

1993-94 year end Date Submitted _____ START: new ___ START continuing ___

List of Students who transferred or dropped out	Transferred out			Quit School			Comments
	Attending elsewhere	Later quit school	Status not known	Employed	Unemployed	Status not known	
TOTALS							

Column no. 1 2 3 4 5 6 7 8

Total Dropouts (total of columns 5, 6, and 7) _____ Dropout Rate (Total Dropouts ÷ Total number of START students) - _____

Transferred and attending ___ Transferred and quit ___ Transferred and attendance status unknown ___ Total transfers ___

Please use separate sheets for START New and START Continuing students.

Report on Dropouts and Transfers School or Jurisdiction _____

1993-94 year end Date Submitted _____ Comparison: new ___ Comparison: continuing ___

List of Students who transferred or dropped out	Transferred out			Quit School			Comments
	Attending elsewhere	Later quit school	Status not known	Employed	Unemployed	Status not known	
TOTALS							

Column no. 1 2 3 4 5 6 7 8

Total Dropouts (total of columns 5, 6, and 7) _____ Dropout Rate (Total Dropouts ÷ Total number of START students) - _____

Transferred and attending ___ Transferred and quit ___ Transferred and attendance status unknown ___ Total transfers ___

Please use separate sheets for New and Continuing students.

Follow-up Report on 1992-93 START Students

School or Jurisdiction _____ Status as of May 31, 1994

Please respond using check-marks. One should appear opposite each student's name.

List of Students	Transferred out after June, 1993	Continued in START in 93-94	Regular program in 93-94	Quit School since June 30, '93			Follow-up not possible
				employed	unem-ployed	Status not known	

EVALUATION OF THE START PROJECT

Executive Summary

Alberta EDUCATION

INTRODUCTION

The START Project was a Stay-in-School initiative funded by Employment and Immigration Canada from March 1991 to March 1995. Both school-based and community-agency based projects were funded. In the first year of the START Project Alberta Education was invited by Employment and Immigration Canada to participate in the selection of school-based projects. Eleven projects were selected and it was agreed to evaluate them during the three years they received funding. The consulting firm of Nyberg Consultants Ltd. was retained to conduct the evaluation. Management and funding of the evaluation was shared by Alberta Education and Employment and Immigration Canada.

PURPOSE OF THE EVALUATION

The purposes were:

1) to identify the indicators most commonly used in selecting potential dropouts for START projects;
2) to track attendance and dropout rates for START project students;
3) to monitor the achievement of START project students;
4) to monitor attitudes of START project students;
5) to compare the relative success of various dropout prevention strategies.

EVALUATION METHODS

Individual START projects were selected for funding based on the proposals and evaluation plans submitted. Each evaluation plan served as the basis for expectations for reporting on the projects. Since the projects were selected for their diversity of prevention strategies, it was important that the START evaluation measure what each project was committed to accomplishing.

continued on page 2

Evaluation Methods (Cont'd)

Minimum reporting requirements were established as a basis for comparison across projects. All projects reported on daily attendance of START students. Background data on each student including age, grade and attendance in the baseline year were supplied. A brief description of each strategy along with the staff's rating of its success was required. A report on the number of project students who dropped out or transferred during the year and follow-up on students from the previous year were also included.

Project staff were responsible for collecting data for their project. The consultants visited each site twice each year to observe the strategies in place and discuss the project with the staff. These visits provided a basis for verification of reports received on the projects.

Four projects reported the results of achievement testing for their START students. These projects all had increased achievement of potential dropouts as a major project objective. A number of attitude measures were administered by the project staff in the fall and spring of the second and third years of the evaluation.

Control groups were initially required of all projects. However, in many schools all potential dropouts were included in the START project leaving no comparable students to form a control group. The project using computer assisted instruction emerged as the only one to form a valid control group.

Description of Projects

The most common characteristic of START projects was the 12 to 14 year age range of students identified as potential dropouts (78.3% were in junior high school grade levels). A few projects included older students as well; however the intent was to help students as young as possible within the limits of the federal guidelines for funding the projects.

Projects varied in the number of schools involved, the number of intervention strategies provided, and most of all, in the strategies themselves. One school used computer assisted instruction for 45 minutes a day with students, as well as providing a social worker to support the students and their families. Another school used the START funds as part of a program for teen

mothers to provide for a daycare worker in the daycare centre for the babies of mothers attending the school. One project used a resource room approach for potential dropouts. Another hired teaching assistants who spoke the languages of ESL students; these assistants attended classes with the students and assisted with assignments.

The range of interventions offered in each project in Year 3 is shown in Chart 1. Counselling and tutoring were the most common strategies and were available to approximately half the students across all projects.

The number of projects decreased over the three-year evaluation. One project received no further funding after the first year due to failure to develop a program. A second project failed to receive further funding after the second year due to limited efforts to mount a program.

Subjects

Project staff were asked to indicate for each student in the START project the reasons for identifying him or her as a potential dropout. The following list shows the seven most frequently used indicators in order of frequency of use (there was no limit to the number of indicators that could be used for each student):

- lack of academic progress
- low motivation in academic subjects
- low self-concept
- social-emotional problems
- negative attitude toward school
- chronic absence
- unstable living situation.

Collecting data on the START students was challenging given that some dropped out of school and returned later in the year or in the following year. All projects added new students each year and carried some students over from the previous year. Total numbers varied with 594 students in Year 1, 873 students in Year 2 and 741 in Year 3.

The numbers of students and project staff declined in the final school year of the project due to the fact that the funding ended at the end of March, 1994 (part-way through the school year). Many projects suffered from reduced efforts in the third year as staff sought other assignments.

CHART 1

Pupils Reported in Each START Component at Year-End

	Jurisdiction number									Totals	
Intervention	1	2	3	4	5	6	7	8	9	No.	%
Total START pupils	52	438	53	21	59	29	65	11	13	741	100
Counselling	52	173	-	21	59	29	49	-	-	383	52
Tutoring	-	222	13	21	59	29	-	-	13	357	48
Achievement testing/monitoring	-	-	-	-	59	-	65	11	13	148	20
Incentive program	52	94	-	-	-	-	-	-	-	146	20
External agency liaison	-	82	-	-	-	-	49	-	-	131	18
Study skills/final exam preparation	-	65	-	-	59	6	-	-	-	130	18
Special classes/academic interv'n	-	43	53	-	-	29	-	-	-	125	17
CAI	-	-	50	-	-	29	46	-	-	125	17
Career assistance	52	-	-	-	59	-	-	-	-	111	15
School Liaison Officer	-	110	-	-	-	-	-	-	-	110	15
Work experience/work shadowing	62	-	4	21	-	8	-	N/A	6	101	14
Attendance monitoring	-	76	-	21	-	-	-	-	-	97	13
Native awareness/crafts	-	18	-	-	59	-	-	-	-	77	10
Bulletin board	-	-	-	-	59	-	-	-	-	59	8
School var/food booth	-	-	-	-	59	-	-	-	-	59	8
Family liaison/home visits	N/A	-	-	21	-	-	21	-	13	55	7
Inservice to teachers	52	-	-	-	-	-	-	-	-	52	7
Peer support/native girls	N/A	20	12	-	11	-	-	-	-	43	6
Community involvement	-	40	-	-	-	-	-	-	-	40	5
Classroom assistance	-	-	-	-	40	-	-	-	-	40	5
Mentoring	27	-	-	-	11	-	-	-	-	38	5
Off campus alternate	-	-	-	-	5	29	-	-	-	34	5
Parent support/parenting	-	31	-	-	-	-	-	-	-	31	4
Mini teaching units	-	-	-	-	-	29	-	-	-	29	4
Self esteem/personal development	-	25	-	-	-	-	-	-	-	25	3
Stress/anger/aggression managem't	-	6	-	-	-	-	17	-	-	23	3
Child care facility/young mothers	-	16	-	-	-	-	5	11	-	33	2
Computer literacy	-	-	-	-	-	-	-	-	13	13	2
Other interventions	N/A	21	N/A	-	-	-	-	11	13	45	6

Jurisdiction code: 1 = Smoky Lake 3 = High Level 5 = Lakeland 7 = Shaughnessy 9 = Clarence Sansom
2 = Lethbridge 4 = Life Values 6 = Edmonton Catholic 8 = Louise Dean
N/A = No data were submitted

From: *Evaluation of Alberta START Projects: Provincial Perspective Final Report, November 7, 1994*

Resources Provided by START Funding

Year 2 was the only year when all projects were in operation for the full year; as well, enrollments were at a maximum for that year. Annual Project funding varied from $24,339 (Louise Dean School – for pregnant teens) to $152,828 (Lethbridge project which operated in four schools) in Year 2 of the project. Although funding was based on the fiscal year from April 1 to March 31, data were collected and results reported according to the school year from September to June. Total funding for the nine projects that continued through the three years of the evaluation was $2.36 million. Per student costs varied from a low of $320 per student in the Lethbridge project that had 478 students to a high of $3,093 per student at Clarence Sansom School where 13 students were assisted by three ESL assistants.

Outcomes

Attendance

Improvement of annual school attendance for students in the START projects was limited (+ 1.0 percent in year 1, + 0.7 percent in year 2 and + 0.5 percent in year 3). The attendance comparisons excluded all students who transferred, dropped out, or for whom either the baseline year (the year immediately prior to joining the project) or the current year's attendance was not reported. A few projects showed impressive gains in attendance (increases of 3% or greater each year of the project).

Dropouts

Given that over three-quarters of the students in the START projects were attending junior high school and therefore likely to be below the legal school leaving age of 16, dropout rates were not expected to be high. The annual dropout rate varied from 7.5% in Year 1 to 7.2% in Year 2 to 6.3% in Year 3. One out of seven dropouts was employed at the end of the school year when data were tallied. Thirty percent of dropouts were not traceable.

In the Shaughnessy High School project where valid attendance data were collected on a comparison group in Years 1 and 2 of the project, there was a major difference between START students and comparison students. The dropout rate for START students was 8.7% compared to 31.3% for the comparison students.

A longer-term examination of dropout behavior was carried out by attempting to trace Year 2 START students at the end of Year 3. The results showed that 30.7% continued in the START Project, 17.8% were attending a regular school program.

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OUTCOMES (CONT'D)

2.3% had left school and were employed, 6.4% had left school and were unemployed and close to half had transferred to another school or could not be traced.

Academic Achievement

Four projects collected data on annual achievement gains of START students. Each project selected their own test according to student ability and project design. Between-project comparisons are therefore of limited use. The Shaughnessy project (using computer-assisted instruction) showed an average gain (rate of increase for the year minus the baseline rate) of .6 grade equivalents in mathematics and .3 grade equivalents in reading. The Clarence Sansom project (offering ESL assistance) showed an average gain of 1.8 grade equivalents in mathematics and 1.4 grade equivalents in reading. The High Level project (using a resource room for START students) showed a gain of 1.2 grade equivalents in mathematics and 0.8 grade equivalents in reading. The Life Values Private School (for students with severe behavior problems) showed a gain of 0.1 grade equivalents in mathematics and 1.1 grade equivalents in reading. Further details of the test results are included in the *Evaluation of Alberta START Projects: Provincial Perspective Final Report, 1994.*

Attitudes

A number of attitude measures were administered in Years 2 and 3. Difficulties were encountered with teacher administration of the measures limiting usable data to approximately one-third of the students. As a result only one attitude measure was used in Year 3 and usable data were collected for 39% of the START students. The low proportion of START students completing the attitude measure data limits the credibility of the results.

The Culture Free Self Esteem Inventory (CFSEI) was administered in the second and third years. Experimentation with various forms to find an age-appropriate measure of self-esteem for START students occurred in the second year. The CFSEI test data in the third year indicated the START project had a generally positive effect on students, especially at the high school level.

The School Subjects Attitude Scales (SSAS) were administered in the second year to measure changes in three aspects of attitude toward school:

- how much school is liked (evaluation)
- how valuable school is to the student (usefulness)
- how easy or hard school is for the student (difficulty).

Students showed statistically significant positive changes on all three factors from fall to spring.

Comparison of Dropout Prevention Strategies

The consultants concluded that all projects reduced dropouts significantly. They found it impossible, however, to rank order the success of the different START projects let alone strategies used within projects. "Comparisons between and among projects present difficulties. The major reason for this is that the entry levels and background characteristics of the START members can vary greatly, according to project. As a consequence, the probability of them dropping out during the project year or the year following varies considerably. Age is also a relevant variable, since older teens are more likely to drop out than those of typical junior high school age" (*Evaluation of Alberta START Projects: Provincial Perspective Final Report, 1994, p. 37*).

Policy and Planning Branch
Alberta Education
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